

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

UNITED STATES OF AMERICA,)	
)	
Plaintiff,)	
)	
v.)	Criminal Action
)	No. 13-10200-GAO
)	
DZHOKHAR A. TSARNAEV, also)	
known as Jahar Tsarni,)	
)	
Defendant.)	
)	

BEFORE THE HONORABLE GEORGE A. O'TOOLE, JR.
UNITED STATES DISTRICT JUDGE

JURY TRIAL - DAY FORTY-NINE

John J. Moakley United States Courthouse
Courtroom No. 9
One Courthouse Way
Boston, Massachusetts 02210
Thursday, April 23, 2015
9:55 a.m.

Marcia G. Patrisso, RMR, CRR
Official Court Reporter
John J. Moakley U.S. Courthouse
One Courthouse Way, Room 3510
Boston, Massachusetts 02210
(617) 737-8728

Mechanical Steno - Computer-Aided Transcript

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I N D E X

	<u>Direct</u>	<u>Cross</u>	<u>Redirect</u>	<u>Recross</u>
<u>WITNESSES FOR THE GOVERNMENT:</u>				
MARC FUCARILE				
By Mr. Weinreb	4			
HEATHER ABBOTT				
By Mr. Mellin	21			
DAVID KING				
By Ms. Pellegrini	35			
MICHELLE GAMBLE				
By Mr. Weinreb	66			
STEPHEN WOOLFENDEN				
By Mr. Mellin	82			

E X H I B I T S

<u>GOVERNMENT'S EXHIBIT</u>	<u>DESCRIPTION</u>	<u>FOR ID</u>	<u>RECEIVED</u>
1608-1610	Photographs of X-rays		17
1653-1657, 1659-1669	Photograph		32
1633	To scale photograph of grate		70
1634C	Video recording with audio		78
1604-5, 1604-6, 1604-9	Photographs		79
1634D	Video recording		81
1597	Photograph		104

P R O C E E D I N G S

THE CLERK: All rise for the Court and the jury.

(The Court and jury enter the courtroom at 9:55 a.m.)

THE CLERK: Be seated.

THE COURT: Good morning, jurors.

THE JURORS: Good morning, your Honor.

THE COURT: We appreciate your patience. The lawyers and I had a few things we had to deal with. We're ready to proceed now to the next witness.

00:10 10 Mr. Weinreb.

11 MR. WEINREB: Good morning, your Honor. The United
12 States calls Marc Fucarile.

13 MARC FUCARILE, duly sworn

14 THE CLERK: State your name, spell your last name for
15 the record, keep your voice up and speak into the mic so
16 everyone can hear you.

17 THE WITNESS: Marc Fucarile. M-A-R-C, last name
18 Fucarile, F-U-C-A-R-I-L-E.

19 DIRECT EXAMINATION

00:10 20 BY MR. WEINREB:

21 Q. Good morning, Mr. Fucarile.

22 A. Good morning.

23 Q. How old are you?

24 A. Thirty-six.

25 Q. Are you married?

1 A. Yes.

2 Q. What's your wife's name?

3 A. Jennifer.

4 Q. Do you have any children?

5 A. Yes.

6 Q. How many?

7 A. One, a seven-year-old boy.

8 Q. What's his name?

9 A. Gavin.

00:11 10 Q. What town do you live in?

11 A. I live in Redding at the moment.

12 Q. How long have you lived there? How long have you lived
13 there?

14 A. Since I got out of the hospital. A year and a half.

15 Q. Where did you grow up?

16 A. I grew up in Stoneham.

17 Q. Where did you go to school?

18 A. I went to Stoneham High School.

19 Q. Were you at the Boston Marathon in 2013?

00:11 20 A. Yes.

21 Q. Who did you go there with?

22 A. I went there -- we met people there. I went to the actual
23 marathon with JP Norden; Stevie B., is what they call him, just
24 the second time of hanging out with him; and Jared Crowley and
25 a female friend of Steven's. I forget her name.

1 Q. Why were you there?

2 A. I was there to support a friend of ours from high school.

3 Q. Who was that? Was it Mike Jefferson?

4 A. Mike J. Mike Jefferson. He's a marine. He was running
5 for fallen soldiers.

6 Q. Do you remember when you arrived at the marathon?

7 A. I think we left the house a little after 11:30. I'm not
8 exactly 100 percent sure when we parked and made the long trek
9 to where we were standing that day.

00:12 10 Q. Okay. So what in general, though, did you do after you
11 arrived in Boston? Where did you go, what did you do?

12 A. We parked. We were actually on the opposite side of
13 Boylston Street from the Forum. And we were supposed to be
14 meeting JP's brother Paul, his girlfriend and -- there was a
15 total of eight of us that day -- on the other side of the
16 street. So we ended up on the wrong side. So we made a long
17 trek up Boylston Street, crossed over at the fire department
18 before Mass. Ave., came back down, down Hereford Street or so,
19 and then walked up I think Newbury or one of those streets to
00:13 20 get back onto Mass. Ave. to come around over Commonwealth Ave.
21 and get on the right side of Boylston Street.

22 Q. So you mentioned JP Norden and Paul Norden?

23 A. Yes.

24 Q. Are they brothers?

25 A. Yes.

1 Q. Are they friends of yours?

2 A. Yes, grew up with them.

3 Q. And you did eventually all meet up together?

4 A. Yes, we did. Right in front of the Forum.

5 Q. I'm going to show you an exhibit.

6 MR. WEINREB: Exhibit 22, please. Let's just not run
7 it yet. This is already in evidence.

8 Q. So if you look at the screen in front of you, you'll be
9 able to see it.

00:13 10 Do you recognize that area?

11 A. Oh, yeah.

12 Q. What is that?

13 A. That's the Forum restaurant we were standing in front of,
14 and this is Boylston Street. I see JP with the red mark on his
15 jacket with his black hat, me in my gray jacket. I have a
16 black hat and sunglasses on.

17 Q. So that screen in front of you is actually touch sensitive
18 and if you --

19 A. Oh, it is? I just touched -- yeah --

00:14 20 Q. There you go. So that arrow is pointing directly at you,
21 correct?

22 A. Correct.

23 Q. And just to your left, you said there's an individual with
24 the red band on his arm?

25 A. Yeah, that's JP.

1 Q. Okay. So we don't see Paul here yet, right?

2 A. No. That's Steve, who drove us there that day.

3 Q. Paul came over a little later?

4 A. Yeah. I think -- yeah, if you play the video --

5 Q. Okay. So let's do that.

6 MR. WEINREB: So if we could just play the first 20
7 seconds here.

8 (Video recording played.)

9 Q. So you see a figure in a white circle walking up towards
00:14 10 the -- where you are.

11 A. Yup.

12 Q. Actually, I think that's Paul right there in the red hat.
13 I think.

14 Q. Okay.

15 (Video recording played.)

16 Q. So I'm going to skip ahead now in the video to about 20
17 seconds.

18 A. Oh, there's Paul in the gray hat.

19 Q. Right. Why don't we play it for the next 25 seconds or
00:15 20 so.

21 (Video recording played.)

22 Q. Okay. So now the person you identified as JP, did he just
23 walk over here --

24 A. JP is right here.

25 Q. Right. And he's tapping somebody?

1 A. He's hugging, I'm pretty sure that's Mike Jefferson's
2 mother.

3 MR. WEINREB: Okay. Can we pause right there for a
4 second.

5 Q. So now these two people right here who I circled in blue.

6 A. That's Paul and JP. Paul is in the dark hat -- I'm sorry.
7 JP is in the dark hat and Paul is in the gray with the white
8 shirt.

9 MR. WEINREB: If you would continue, please.

00:16 10 (Vide recording played.)

11 MR. WEINREB: And pause right here.

12 Q. What are you wearing on your face and your head in that
13 photo?

14 A. I have a black hat and sunglasses.

15 MR. WEINREB: Continue, please. Actually, we're done
16 there. Let's skip ahead now to a few minutes, three minutes,
17 actually, ahead.

18 (Video recording played.)

19 Actually, pause it there for a second, please.

00:16 20 Q. Do you remember bombs going off?

21 A. Yeah, I remember the first -- yeah, I remember the first
22 one.

23 Q. What happened when the first bomb exploded?

24 A. Like everybody kind of flinched and looked in the
25 direction of the first bomb, which would be to my left down the

1 street closer to the finish line.

2 MR. WEINREB: Can you play it, please.

3 (Video recording played.)

4 Q. So what happened? What do you remember happening after
5 that? You said everybody flinched and looked to the left.
6 What did you do?

7 A. We kind of all looked at -- like looked around to see
8 where to go, what to do. We all agreed it wasn't good. We
9 knew it was something. I'm a person who in my mind I always
00:17 10 think the worst-case scenario situation, so I knew: Perfect
11 place to do something bad, you know? I'm always thinking
12 crowds like that, easy targets.

13 Q. So what did you do?

14 A. I stepped back, and next thing I remember is looking up at
15 the sky.

16 Q. What do you remember after that?

17 A. A lot of yelling, a lot of screaming, people calling for
18 tourniquets, a tablecloth. I remember a lot of pressure on my
19 chest. It felt like someone was sitting on my chest but it was
00:18 20 the nurse actually holding me down. And I remember her
21 screaming, "Oh, shit. He's still on fire," so I -- she said,
22 "We need to cut his pants off, I need scissors." And I
23 actually said "my pants" in my head, so I helped undo my belt
24 buckle, and that's where I got the third degree burn on my
25 hand, that skin graft, from the belt buckle being so hot. So I

1 helped her get my belt buckle off and what was left of my pants
2 at the end, more Daisy Dukes.

3 MR. WEINREB: Can we play Exhibit 23 which is also in
4 evidence? Okay.

5 Q. So we're going to pick up now where that other video left
6 off, and I'd just ask you to direct your attention to where you
7 were standing right before the bomb exploded.

8 (Video recording played.)

9 MR. WEINREB: Would you pause it for one second there,
00:19 10 please.

11 Q. Do you see yourself?

12 A. Yeah, I'm right here. I was standing here.

13 Q. Okay.

14 MR. WEINREB: Continue, please, Mr. Bruemmer.

15 (Video recording played.)

16 A. You can see the fire in my crotch right there. And this
17 is before the nurse came over.

18 Q. Okay. So what are you doing there?

19 A. Trying to get up.

00:20 20 Q. Okay. Continue.

21 A. That's when I realized that something bad had happened.

22 (Video recording played.)

23 MR. WEINREB: Okay. Let's pause here for a second.

24 Q. Now, directing your attention to your right leg over
25 there, what happened to your right leg?

1 A. Amputated instantly right through the knee.

2 Q. Now, you mentioned before that you were on fire?

3 A. Yeah, you could see the flames.

4 Q. How badly were you burned?

5 A. A lot. Probably 90 percent of my lower extremity from my
6 waist down.

7 Q. How about your face?

8 A. Oh, yes. I didn't even -- my face, second degree. I had
9 scarring. My lips; my hair was singed, burnt; forearms; my
00:21 10 hands; pieces of my chest from -- pieces of my back.

11 Q. Your legs?

12 A. Yeah, my legs: Skin graft.

13 Q. How many skin grafts did you need to prepare the damage?

14 A. A lot. I have -- they took probably 80 percent of my
15 back -- the skin off my back; they took -- they needed more
16 skin so they took off the front of my thigh area where they
17 needed just to try to gain anywhere that wasn't burnt.

18 Q. What does it mean to have a skin graft?

19 A. It's kind of like a cheese grater. They slice your skin
00:22 20 off, thin, thin, and then they spread it out using like
21 a -- almost like a pizza dough roller to make the skin actually
22 larger to cover more of an area so...

23 Q. You said they took it primarily from your back?

24 A. Yeah.

25 Q. When you would sleep at night, were you able to sleep on

1 your stomach?

2 A. No.

3 Q. So you had to sleep on your back?

4 A. Yes.

5 Q. Was your hearing affected?

6 A. Yes.

7 Q. In what way?

8 A. Both my eardrums were perforated, blown apart. I'm pretty
9 much permanently deaf in my right ear, and in my left ear I

00:22 10 lost -- some severe inner ear damage, which is my hearing.

11 Q. What exactly happened to your right leg, the one you said
12 was amputated on the scene?

13 A. Went out in the street, I guess. A firefighter told me I
14 handed it to him. I don't recall that. And from what I've
15 seen of the video -- I haven't seen the whole video, so I don't
16 know.

17 Q. But was it amputated above or below the knee?

18 A. It's hard to tell. I don't know if you have the pictures
19 from when I was on the -- but...

00:23 20 Q. What about after, when you went to the hospital?

21 A. Oh, yeah. Since surgery I've been an above-the-knee
22 amputee, but I've had two revisions already, so I'm shorter
23 above the knee. And I go for a third revision May 5th now.

24 Q. What's a revision?

25 A. The first two were done primarily because of infections,

1 and HO, when your bone actually grows bone spurs and it
2 inflames everything. And so I had two infections -- two bone
3 infections -- so they had to cut the bone shorter, re-stitch
4 you, and now I have what's called evagination, where it
5 actually -- scar pulls in towards the bone, so it creates an
6 air pocket in my prosthetic, so that doesn't fit properly. So
7 now I'm going down to get a revision. This one's not due to
8 infection or bone loss, but they will be cutting off some bone
9 to stretch the muscle over the front of it, and then they'll
00:24 10 layer stitch it to stop the skin from actually being able to
11 pull in so I can get a normal fit on a prosthetic without
12 having -- what I'm having now is blistering and skin breakdown
13 because of that little air pocket, that evagination gives.

14 Q. What happened to your left leg?

15 A. My left leg was severely burnt, blew off calf muscle,
16 major artery loss, giant hole. The back of my heel bone was
17 shattered, my joints in my foot were separated. They re-pinned
18 all my foot back together, re-pinned the tendons on to the
19 joints to keep them in line, filled with debris, shrap metal.

00:25 20 Q. You're speaking in the past. Is that all done? Is it all
21 fixed?

22 A. No, no. I just spent yesterday three hours getting probed
23 with needles to do nerve testing because they're trying to
24 figure out why my left foot is in the pain that it's in. And I
25 still need to go in and debride more of my heel bone that was

1 blasted into my ankle, they haven't taken that out yet, so
2 they're going to take that out as well on May 5th when I do my
3 revision. And they nerve-blocked one of my nerves yesterday as
4 well.

5 Q. Do you know if you're going to be able to keep your left
6 leg?

7 A. No, nothing. No, not at all. That's what we're trying to
8 do still, if we can. I'm in what they call an IDEO brace right
9 now. It's a similar -- it's actually the exact same thing Jess
00:26 10 Kensky had. And it keeps your foot pretty much straightened
11 and offloads all of the weightbearing up into my skin grafts
12 under my knee.

13 Q. So the goal here is to save your left leg?

14 A. Yeah, we're going to try. Yup.

15 Q. And if they're not able to save it, have they told you
16 where it will have to be amputated?

17 A. Above the knee more than likely. They said they would
18 attempt to cut me below the knee but it doesn't look promising
19 and eventually it could go up.

00:26 20 Q. Are you able to use a prosthetic limb rather than a
21 wheelchair?

22 A. Very occasionally. I got a time when I wear it and use it
23 because of the skin breakdown because I'm burned on the both
24 right and left -- back of my left and right leg and on my ass,
25 so where the prosthetic attaches up to your butt -- sorry -- a

1 little swearing -- up, it rubs on the skin graft. And it
2 actually, because it's so thin it breaks down, so it creates
3 open wounds. So you got to take off your leg and let it heal
4 before you could put it back on again usually.

5 Q. How long were you in the hospital after the bombing?

6 A. I was in Mass. General 45 days, which I was released early
7 to get to Spaulding, so I was in hopes of seeing my kid; like
8 my son being able to stay with me because they told me he
9 would, which it didn't turn out that way. So I was in there
00:27 10 for 45 days. I was promised I wasn't going to leave with any
11 open wounds from Mass. General, but I left with three Wound
12 VACs.

13 Q. What's a Wound VAC?

14 A. A Wound VAC is like a sponge-type material that they put
15 over a wide-open wound. And then they tape it, seal it off,
16 they poke a hole and put a little suction cup with a hose that
17 goes through a machine that sucks fluid and -- so it doesn't
18 pool and create bacteria. And then they have to change that
19 every couple of days because that actual mesh netting, looks
00:28 20 like a sponge, it adheres to your skin, so you've got to take
21 it off and then put a new one on.

22 And I had three of them. I had one on my right leg, one
23 on my left heel, and one on my left ankle. Because where the
24 tendon died, they couldn't adhere a skin graft to until some
25 other stuff happened.

1 Q. Is all of this in an effort to ward off infection?

2 A. Yes.

3 Q. In order to ward off infection, did you have to take a lot
4 of medication?

5 A. Yes.

6 Q. How much medication?

7 A. 24 pills in the morning, 22 pills in the afternoon, and 26
8 at night, and that's not counting some other just in-between
9 stuff. That was just my main dosage of medication.

00:29 10 Q. You mentioned earlier that there was shrapnel in your
11 body?

12 A. Yes.

13 Q. You provided us with some X-ray photos the other day, and
14 those are Exhibit 1608, 1609 and 1610. Are those, to the best
15 of your knowledge, X-rays of your body that were taken during
16 your treatment?

17 A. I don't see them here but I can recall -- I remember
18 sending them to you, yeah.

19 MR. WEINREB: The government offers 1608, 1609 and
00:30 20 1610.

21 MS. CONRAD: As previously noted, your Honor.

22 THE COURT: All right. They'll be admitted.

23 (Government Exhibit Nos. 1608, 1609 and 1610 received
24 into evidence.)

25 MR. WEINREB: Can I have 1608, please.

1 BY MR. WEINREB:

2 Q. If you'd look at your screen, do you see that?

3 A. Yeah.

4 Q. Do you know what those white circles represent?

5 A. Yes. Ball-bearings, BBs.

6 Q. And I'm going to circle something right here.

7 A. Yup.

8 Q. It's straight. What's that?

9 A. That's a nail.

00:30 10 Q. Were they able to remove all of those from your body?

11 A. No. It's not worth risking. They did remove some of them
12 because they had to because there was a threat of ruining my
13 urinary tract and causing some major problems, infections.
14 More problems and more infection. They were only able to get
15 two out of the three that they were concerned about.

16 MR. WEINREB: May we have 1610, please.

17 Q. Is that also a picture of you?

18 A. Yes.

19 Q. Are those also BBs?

00:31 20 A. Yes.

21 Q. Do you know how many of those they were able to remove?

22 A. Just the ones that forced themselves out. There's also
23 things you can't see, is the plastic pieces and stuff.

24 Q. They're still in your body?

25 A. Yes.

1 MR. WEINREB: 1609, please.

2 Q. What's that?

3 A. I don't know if that's from -- is that -- those are more
4 BBs, but I'm just trying to see.

5 Q. If you don't know, that's all right. But let me ask you
6 something else. Was there a piece of shrapnel or BB lodged in
7 or near your heart?

8 A. Yeah, it's in my right atrium.

9 Q. What's the right atrium?

00:32 10 A. Of your heart. You have a right and your left atrium.
11 That's where your blood returns to your heart. And it --
12 actually, they couldn't find any direct path, so there was no
13 penetration through my heart, so it came up through my artery.
14 Because the bomb literally went off under me and the blast came
15 up and it actually went through my vein back into my right
16 atrium and it lodged into the right atrium right before the
17 valve, left valve, which is going to the left atrium, which
18 should pump to your lungs. And that's where it
19 probably -- they're worried about it puncturing my lungs if it
00:32 20 releases.

21 Q. What would happen -- have you been told what would happen
22 if it released and punctured your lungs?

23 A. Yeah, I would have a collapsed lung and I would have to
24 get to the hospital before I didn't breathe anymore.

25 Q. Do you know what happened to JP Norden?

1 A. Yeah, JP Norden is a right leg below. We call it a BK,
2 below-the-knee amputee.

3 Q. What about his brother Paul Martin?

4 A. Yeah, Paul Norden's a right leg AK, above-the-knee
5 amputee. And both had other wounds and...

6 Q. So how many surgical procedures have you had since the
7 bombing?

8 A. In the high 60s surgical procedures.

9 Q. And, in fact, where were you this morning when you woke
00:33 10 up?

11 A. I was actually at Walter Reed Medical Hospital down in
12 D.C.

13 Q. Why are you there?

14 A. I'm there continuing my surgeries. That's what I'm
15 getting ready to do for May 5th.

16 Q. Have the doctors told you that there's any end in sight
17 for the need to keep doing surgeries and...

18 A. No, there isn't right now. They don't know. They're
19 still trying to figure out what they're going to do with my
00:33 20 left leg even on -- they have the surgery date for the 5th.

21 They know what they're doing with my right, but it's still -- I
22 know the debris in the left ankle from the bone fragments, but
23 as far as the nerve and the other pain in my left foot, that's
24 what I still got to go back down on Monday and Tuesday to do
25 more testing.

1 Q. Do you understand what the risks are for you going forward
2 given your injuries and all these procedures?

3 A. Yes.

4 Q. What are they?

5 A. I mean, it could be anything from infections to death to
6 above-the-knee amputation from everything.

7 MR. WEINREB: No further questions, your Honor.

8 MS. CONRAD: No questions.

9 THE COURT: No questions? All right, sir. Thank you.

00:34 10 THE WITNESS: Thank you.

11 (The witness is excused.)

12 MR. MELLIN: The United States calls Heather Abbott.

13 HEATHER ABBOTT, duly sworn

14 THE CLERK: State your name, spell your last name for
15 the record, keep your voice up and speak into the mic so
16 everyone can hear you.

17 THE WITNESS: Heather Abbott.

18 DIRECT EXAMINATION

19 BY MR. MELLIN:

00:36 20 Q. Ms. Abbott, can you spell your last name for the court
21 reporter?

22 A. A-B-B-O-T-T.

23 Q. Good morning.

24 A. Good morning.

25 Q. Ms. Abbott, where did you grow up?

1 A. I grew up in Rhode Island. Lincoln, Rhode Island.

2 Q. Did you go to school in Rhode Island?

3 A. Yes, I did.

4 Q. What did you do after high school?

5 A. I'm sorry?

6 Q. What did you do after high school?

7 A. I went to college at Stonehill College about 20 minutes
8 south of Boston.

9 Q. Did you graduate?

00:36 10 A. I did graduate.

11 Q. Okay. And after graduation, what did you do?

12 A. I went to work for a certified public accounting firm as
13 an accountant.

14 Q. Did you stay with that?

15 A. I didn't. Eventually I got my MBA and went into human
16 resources.

17 Q. Accounting was too boring so you moved on?

18 A. It was a little boring.

19 Q. All right.

00:37 20 In April of 2013, were you in a job doing human resources?

21 A. Yes, I was.

22 Q. And at that time who were you working for?

23 A. I was working for Raytheon.

24 Q. On April the 15th of 2013, did you go to the area around
25 the Boston Marathon?

1 A. Yes, I did.

2 Q. And did you attend the Red Sox Patriots' Day game?

3 A. Yes.

4 Q. Is that something you did typically or often?

5 A. Yes. It was sort of a tradition, to go to the Red Sox
6 game on Marathon Monday, and then walk over to the finish line
7 afterwards.

8 Q. So on April 15, 2013, did you stay for the whole Sox game
9 or did you leave early?

00:37 10 A. We left early.

11 Q. Where did you head after the Red Sox game?

12 A. We headed to the Forum restaurant where we had planned to
13 meet some friends.

14 Q. Had you been to the Forum before?

15 A. Yes, I had.

16 Q. Approximately how many other times had you been at the
17 Forum?

18 A. Probably five or six.

19 Q. So that day as you headed over to the Forum, what
00:38 20 happened?

21 A. I headed over to the Forum with a group of friends. There
22 were six, seven of us all together. We got split up and four
23 made it inside before the three of us who lagged behind. And
24 the three of us who were lagging behind knew that -- had gotten
25 texts from them that they were inside and to meet them in

1 there.

2 So when we arrived at the Forum, we stood at the door, and
3 the doorman asked for our IDs. And I was taking my wallet
4 right out of my purse when I heard the first explosion.

5 Q. If I can have you, please, look at Exhibit 2101?

6 MR. MELLIN: Which is in evidence, your Honor.

7 Q. Ms. Abbott, do you recognize Exhibit 2101?

8 A. Yes, I do.

9 Q. And do you know that's the area right outside the Forum?

00:39 10 A. Yes.

11 Q. Okay. The other times that you've been to the Forum, had
12 you gone to the Forum on Marathon Monday?

13 A. Yes.

14 Q. Did the Forum always have it set up where they kind of had
15 this outdoor seating available?

16 A. They did.

17 Q. How crowded was that area right around the Forum as you
18 came down?

19 A. It was extremely crowded.

00:39 20 MR. MELLIN: I'd like to blow up a portion of 2101.

21 Q. And as you look at that, do you see yourself in that
22 photo?

23 A. Yes, I do.

24 Q. That's an interactive screen. Can you do us a favor and
25 circle you in this photo.

1 A. (Witness complies.)

2 Q. All right. For the record, you circled the woman who has
3 on a white scarf and a baseball cap?

4 A. Yes.

5 Q. Okay. Who else was there with you at that time?

6 A. My friend Michelle and my friend Jessica.

7 Q. Do you see them in that blowup?

8 A. Yes.

9 Q. Can you circle them as well?

00:39 10 A. (Witness complies.)

11 Q. And for the record, you circled the taller of the blonde
12 women and then also a woman in the middle who's got a white top
13 with dark hair?

14 A. Yes.

15 Q. All right. So this was taken about the time of the first
16 explosion. At that point what did you do?

17 A. I looked in the direction of the explosion and I saw smoke
18 and started hearing people scream, and immediately what came to
19 mind was footage I had seen on 9/11 when the buildings

00:40 20 collapsed.

21 Q. So what did you do?

22 A. I didn't have a chance to do anything because before I
23 could really even react, the second explosion occurred.

24 Q. When the second explosion occurred, what did you do?

25 A. I was catapulted through the front doors of the

1 restaurant, which were open, and I landed on the ground in a
2 puddle of chaos and glass and blood right inside the front of
3 the restaurant.

4 Q. So when we looked at that photo, 2101, you're outside the
5 Forum; in fact, you're just kind of right at the edge of that
6 seating area. Is that right?

7 A. Yes.

8 Q. When the blast occurs, though, you are forced into the
9 inside of the Forum?

00:41 10 A. Yes.

11 Q. When you're there, are you standing up or are you on the
12 ground?

13 A. I landed on the ground.

14 Q. You mentioned that you saw chaos. Can you describe what
15 you saw?

16 A. People were running in herds by me through the restaurant
17 to get towards the back exit away from where the bomb was.

18 Q. What did you do?

19 A. I felt as though my foot were on fire. I was in
00:41 20 excruciating pain. And I thought -- I looked at it to see if
21 it actually had flames coming out of it, and when it didn't, I
22 decided I shouldn't look at it again because I was afraid I
23 would pass out.

24 Q. When you looked at it, what did you see?

25 A. I didn't see anything, but it was extremely painful so I

1 knew something was wrong and I knew I couldn't get up and run.

2 Q. So what did you do?

3 A. I started to crawl towards the back of the building where
4 everybody was running to. And I was trying not to get
5 trampled, and I started screaming out for help.

6 Q. Did anyone come over to help you?

7 A. Yes. Two women came over, and they were trying to help me
8 get up. One of them started saying the Hail Mary as she was
9 helping me. And she realized that she wasn't going to be able
00:42 10 to help me after she looked at my foot and she called her
11 husband over, and he picked me up and started to carry me out.

12 Q. At that time what were you thinking?

13 A. I was thinking that I really wanted to get into an
14 ambulance. I wanted to get away from where the bomb was. I
15 didn't know it was a bomb at the time. And when I looked down
16 at the ground while he was carrying me out, I saw blood pouring
17 out of my foot.

18 Q. What were you feeling at that point?

19 A. I was in tremendous pain.

00:43 20 Q. Was there a specific part of your body that you felt pain
21 or was it all over, or how would you describe it?

22 A. It was my left foot.

23 Q. The person that picked you up, what did he do with you?

24 A. He brought me out to the back. As he was carrying me, one
25 of my friends that I had planned to meet came back into the

1 restaurant to look for me, and he asked the gentleman that was
2 holding me to give him -- to give me to him. And he said,
3 "Look at her foot." And when I saw his face, he looked
4 horrified. And they brought me back to the back alley and laid
5 me down on the ground on the asphalt.

6 Q. Approximately how long were you in the back alley?

7 A. I'm not sure. It felt like forever. All I wanted was an
8 ambulance to come get me, but I think it was just a matter of
9 maybe a few minutes.

00:44 10 Q. Could you see blood while you were in the back alley, or
11 did you see blood pooling?

12 A. I saw blood on my friend Jessica's coat who was holding me
13 at the time and hugging me.

14 Q. At some point did someone come with a board to carry you
15 out of there?

16 A. Yeah. While I was lying on the ground, there was a man
17 and a woman who were discussing how to -- how to help me. They
18 instructed one of my friends to give his belt, and they tied a
19 tourniquet around my leg, which was extremely painful. They
00:44 20 looked for a way to get me out of the alley, and they found a
21 door in one of the Dumpsters. And when they were talking about
22 how to get me on it, finally an ambulance arrived. But there
23 was trouble getting back there because everything was
24 barricaded. So the ambulance -- the EMTs came back and had to
25 bring me back through the front of the restaurant onto the

1 street to get me in the ambulance.

2 Q. You mentioned someone put a tourniquet on you. Where did
3 they put the tourniquet on?

4 A. On my left leg.

5 Q. Above or below your knee?

6 A. I don't remember.

7 Q. Okay. You ultimately end up in an ambulance, right?

8 A. I'm sorry?

9 Q. You ended up in the ambulance?

00:45 10 A. I ended up in the ambulance. They wouldn't let anyone
11 come with me because the ambulance was so full. And I didn't
12 have my identification or anything. And I was very worried
13 that no one would be able to find me, so I asked one of the
14 EMTs to call my parents.

15 Q. Where were you taken?

16 A. I was taken to Brigham and Women's.

17 Q. What happened when you got to Brigham and Women's?

18 A. When I got to Brigham and Women's, I finally kind of let
19 go. And I don't really remember much of what happened aside
00:45 20 from getting wheeled inside the front doors.

21 Q. When you say you let go, what do you mean by that?

22 A. I was just very worried about what was going to happen to
23 me, about getting into a hospital, getting treated, because I
24 knew that my foot was hurt pretty bad. So I think when I got
25 there, I knew it was okay to just put myself in the hands of

1 the doctors there at that point.

2 Q. Did you have surgery at that point?

3 A. Yes.

4 Q. And what was the result of the surgery?

5 A. During that surgery they were trying to save my left foot.
6 They took a vein out of my right leg and transferred it to my
7 right foot -- my left foot. And they were trying to assess
8 whether or not it would be salvageable.

9 Q. How many attempts were made to salvage your foot?

00:46 10 A. Three.

11 Q. When was the last attempt?

12 A. The last attempt was the Thursday after the bombing.

13 Q. And then at that point what happened?

14 A. The surgeon told me that I had a choice to make. He told
15 me that he recommended having my leg amputated below the knee,
16 which was surprising to me because it was just my foot that was
17 injured. But he said in order to wear prosthetic devices, I'd
18 have to have more of my leg amputated than just the part that
19 was damaged. Or he said I could keep the leg, and he told me
00:47 20 that I'd have to have my ankle fused. And because my heel was
21 entirely blown off, I would have to have skin from another part
22 of my body transferred to my heel. And he told me that one of
23 my legs would be shorter than the other, I would never run
24 again. He said maybe I'd be able to walk but I'd be in
25 excruciating pain and I would have to have dozens and dozens of

1 surgeries.

2 Q. Prior to April the 15th, had you run before?

3 A. Yes, I did.

4 Q. That weekend had you run in any races?

5 A. No, I didn't.

6 Q. Okay. How did you make the decision what to do?

7 A. The surgeon sent many veterans in to talk with me who had

8 similar blast injuries, and they talked to me about limb

9 salvage and their experiences. And after a lot of thought and

00:48 10 consultation, I decided to go ahead and have my leg amputated.

11 Q. How did that make you feel?

12 A. It was probably the hardest decision I've ever had to

13 make.

14 Q. In total, how many surgeries have you had?

15 A. Four on my leg, and I had an in-office surgery on my

16 ear -- eardrum.

17 Q. What happened to your ears?

18 A. There was a hole in my right eardrum.

19 Q. And as you sit here today, are you wearing a prosthetic

00:48 20 leg?

21 A. Yes, I am.

22 Q. I believe it has a high heel. Is that right?

23 A. It does.

24 Q. Okay. In fact, it has your toes, is that right, as well?

25 A. Yes.

1 Q. Since April the 15th of 2013, have you had a chance to
2 meet the other amputee survivors?

3 A. Yes, I have.

4 Q. Okay.

5 MR. MELLIN: If we could, I would like to pull up a
6 few photos. We could start with -- and just for the witness,
7 your Honor -- actually, if there's no objection, I will just
8 seek to admit 1653 through 1669 excluding 1658.

9 MS. CLARKE: Subject to the previous --

00:49 10 THE COURT: All right. As we previously discussed,
11 those may be admitted.

12 (Government Exhibit Nos. 1653 through 1657 and 1659
13 through 1669 received into evidence.)

14 MR. MELLIN: Thank you. If we could pull up 1656,
15 please.

16 BY MR. MELLIN:

17 Q. Ms. Abbott, do you recognize who's in photo 1656?

18 A. I do. That's me.

19 Q. All right. Is that the leg you're wearing today or is
00:49 20 that a different one?

21 A. It's the leg I'm wearing today.

22 MR. MELLIN: If we could pull up 1653, please.

23 Q. Do you recognize who's in that photograph?

24 A. Celeste, Kevin and Sydney Corcoran.

25 Q. All right.

1 MR. MELLIN: 1654.

2 Q. Do you recognize who's in that photograph?

3 A. Adrianna Haslet-Davis.

4 MR. MELLIN: 1655.

5 Q. Do you recognize who's wearing the Ravens T-shirt?

6 A. Erica Brannock.

7 MR. MELLIN: 1657.

8 Q. Do you recognize who's in that photograph?

9 A. Jeff Bauman.

00:50 10 MR. MELLIN: 1659.

11 Q. Do you recognize who's in that photograph?

12 A. Jane Richard.

13 MR. MELLIN: 1660.

14 Q. Do you recognize who's in that photograph?

15 A. JP Norden and Paul Norden.

16 Q. And as you look at the photograph, they're both in -- on
17 the left is who?

18 A. JP.

19 Q. Okay.

00:51 20 MR. MELLIN: 1661.

21 Q. Do you recognize who's in that photograph?

22 A. Karen Rand McWatters.

23 MR. MELLIN: 1662, please.

24 Q. Who's in that photograph?

25 A. Mary Daniels.

1 MR. MELLIN: 1663, please.

2 Q. Who's that in that photograph?

3 A. Marc Fucarile.

4 MR. MELLIN: 1664.

5 Q. There are two people in that photograph. Who's in that
6 photograph?

7 A. Patrick Downes and Jessica Downes.

8 Q. Also a dog?

9 A. Rescue.

00:51 10 MR. MELLIN: 1665, please.

11 Q. Do you recognize who that is?

12 A. Paul Norden.

13 MR. MELLIN: 1666.

14 Q. Who's in that photograph?

15 A. Rebekah Gregory.

16 MR. MELLIN: 1667.

17 Q. Who is that?

18 A. Roseann Sdoia.

19 MR. MELLIN: 1668, please.

00:52 20 Q. Who is that?

21 A. Steve Woolfenden.

22 Q. All right. In the picture there's a little boy. Do you
23 know who the little boy is?

24 A. Leo.

25 MR. MELLIN: 1669, please.

1 Q. Do you know who's in that photograph?

2 A. That's Mary Jo White, Kevin White and Bill White.

3 Q. Okay. And of the three that are in the photograph, who
4 lost a leg?

5 A. Bill White.

6 Q. And that's the gentleman on the far right in the photo?

7 A. Yes.

8 Q. Thank you.

9 MR. MELLIN: Thank you, your Honor.

00:52 10 MS. CLARKE: Thank you very much.

11 THE COURT: All right, Ms. Abbott. Thank you. You
12 are excused.

13 (The witness is excused.)

14 MS. PELLEGRINI: The United States calls Dr. David
15 King.

16 DAVID KING, duly sworn

17 THE CLERK: State your name and spell your last name
18 for the record.

19 THE WITNESS: David King, K-I-N-G.

00:53 20 DIRECT EXAMINATION

21 BY MS. PELLEGRINI:

22 Q. Good morning, Dr. King.

23 A. Good morning, ma'am.

24 Q. Will you tell the jury where you are currently employed?

25 A. I'm a trauma and acute care surgeon at the Massachusetts

1 General Hospital.

2 Q. Can you give us a little bit of your educational
3 background, please.

4 A. I have a bachelor's degree in biology from the University
5 of Tampa, my medical doctorate's from the University of Miami.
6 I did my residency and fellowship training in general surgery,
7 trauma surgery and surgical critical care, divided in pieces
8 between the Beth Israel Deaconess here in town and University
9 of Miami and Jackson Memorial Medical Center and the Ryder
00:54 10 Trauma Center.

11 Q. And with respect to your current position, can you tell us
12 exactly what that is?

13 A. So as a -- I'm a member of the division of trauma
14 emergency surgery and surgical critical care. My job is to
15 care for the acutely injured and acutely ill, those with
16 surgical diseases. That includes all aspects of emergency
17 surgery for any of those conditions. And then as an intensive
18 care physician, we take those patients, we operate on and
19 follow them throughout their entire hospital course.

00:55 20 Q. In addition to the position that you currently hold, are
21 you also an instructor or an assistant professor?

22 A. I'm an assistant professor of surgery at the Harvard
23 Medical School.

24 Q. And in addition to your background that you've just
25 described to us, do you have training as a combat surgeon?

1 A. I do. I've been in the United States Army for 14 years.

2 Q. And what are the duties of a combat surgeon?

3 A. My primary duties in the military are to take care of
4 wounded soldiers -- sailors, Marines and airmen -- but also in
5 accordance with the Geneva Convention, to take care of anyone
6 injured on the battlefield whether they be enemy, host nation,
7 national. Anybody who's injured.

8 Q. And specifically have you been the chief of surgical
9 services as part of the Operation Enduring Freedom and

00:55 10 Operation Iraqi Freedom?

11 A. Yes, ma'am, I have.

12 Q. All right. And that would mean that you were deployed
13 where?

14 MR. BRUCK: As noted, your Honor.

15 THE COURT: I'm sorry?

16 MR. BRUCK: As noted.

17 THE COURT: Oh, okay.

18 MR. BRUCK: Our objection.

19 THE COURT: I didn't hear you. Yes. It may be given.

00:56 20 We've dealt with the issue.

21 MS. PELLEGRINI: He may answer, your Honor?

22 THE COURT: Yes, go ahead.

23 BY MS. PELLEGRINI:

24 Q. You may answer, Dr. King.

25 A. I was deployed to Iraq as part of Operation Enduring

1 Freedom -- pardon -- Operation Iraqi Freedom and in Afghanistan
2 as part of Operation Enduring Freedom. I was also deployed to
3 Haiti on a humanitarian mission after the earthquake.

4 Q. Dr. King, as a result of your educational and professional
5 background, are you familiar with the clinical manifestations
6 of improvised explosive devices or IEDs?

7 A. Yes, ma'am, I am.

8 Q. And just generally speaking, how many cases have you
9 treated that involved injuries related to IEDs?

00:56 10 A. Over the course of my entire training and military
11 experience and civilian experience as a trauma surgeon in
12 general, hundreds for certain, perhaps even a thousand or more
13 for certain.

14 Q. Dr. King, on April 15th of 2013, did you respond to the
15 Massachusetts General Hospital after the bombings?

16 A. Yes, ma'am, I did.

17 Q. And as a result of your response there, what did you see?
18 What were your observations?

19 A. Well, on my way to the hospital I really had no idea what
00:57 20 was happening. I just knew that some circumstance, I had no
21 idea, arose that likely would require my expertise and the
22 expertise of our entire team there. No one works in a vacuum
23 at a hospital like that or anywhere in town. And when I
24 arrived in the emergency department, I arrived just as the
25 first wave of casualties had shown up. And I looked across the

1 patients and I knew immediately without anyone really having to
2 tell me exactly what the wounding mechanism was and what had
3 happened. Of course, not the details. But as I looked across
4 the injured patients in a few instants, in just a few moments,
5 the pattern of injuries was fairly predictable and
6 stereotypical for injuries that I'd seen hundreds and thousands
7 of times caused by explosive devices.

8 MR. BRUCK: Your Honor --

9 THE COURT: That may stand.

00:59 10 Go ahead.

11 BY MS. PELLEGRINI:

12 Q. And what specifically were those physical -- what were
13 those characteristics that you identified?

14 A. So the -- sadly, the type of wounds that we see from
15 explosive devices that are placed on the ground is fairly
16 typical. It involves blast and fragmentation injury primarily
17 to both lower extremities, and depending on how big the blast
18 is, that blast and fragmentation injury can extend higher and
19 higher on the torso. This was the pattern that was really
00:59 20 fairly obvious from the doorway, meaning without even really
21 laying hands on the patients, any surgeon with similar
22 experience, and even some surgeons without similar experience,
23 quite honestly, who have read peer-reviewed literature would be
24 able to identify this fairly characteristic pattern of injury.

25 Q. Dr. King, you indicated that -- you're talking about the

1 lower part of the bodies that you're seeing at that point. Is
2 that correct?

3 A. That's correct.

4 Q. So those are your initial and preliminary observations?

5 A. Right.

6 Q. Right. Were your subsequent observations and closer
7 inspection able to confirm your opinion?

8 A. Yes. So as I said, this is a judgment made in an instant
9 looking over all the patients within my line of sight when I
01:00 10 first arrived.

11 Q. How many were there?

12 A. You know, I don't exactly recall. Certainly that's
13 findable information. I know for certain how many I looked at.
14 I don't know how many were in the ED at that instant, the
15 moment I arrived.

16 Q. I'm sorry. How many did you look at?

17 A. I personally looked over three.

18 MR. BRUCK: Your Honor, please. We would just like
19 there to be less of a narrative and more questions.

01:01 20 MS. PELLEGRINI: Well, your Honor, this is an expert
21 witness.

22 THE COURT: Well, I don't think it went too far so
23 far, but be aware of it, please.

24 MR. BRUCK: Thank you.

25 MS. PELLEGRINI: Yes, sir.

1 BY MS. PELLEGRINI:

2 Q. How many did you treat yourself, Dr. King?

3 A. In that very moment, I personally examined three.

4 Q. And did your observations of those three patients confirm
5 your initial concern regarding the nature of the injury?

6 A. Yes, ma'am. My cursory examination of those three
7 patients, and one in particular who I deemed at that very
8 moment to be extremely critical, confirmed my initial
9 observation that these were injuries and patterns of injuries
01:01 10 consistent with an improvised explosive device.

11 Q. And what exactly were those observations?

12 A. It was traumatic amputations of the lower extremities with
13 burn blast and fragmentation wounding that was worse towards
14 the lower half of the body and improved as it -- as the
15 examination went towards the upper end of the body, which is
16 fairly characteristic.

17 Q. Dr. King, you just used the phrase "traumatic amputation."
18 I take it that differs from surgical amputation?

19 A. Yes, ma'am.

01:02 20 Q. In what way?

21 A. So we use the term "traumatic amputation" to -- so the
22 term "amputation," of course, means the loss of part of a
23 distal limb, right? So that can be an arm or leg. It can be
24 any appendage, actually. It can be an ear, nose, whatever.
25 And we characterize a wound as a traumatic amputation even

1 though -- so some of them are very easy. So if the wounding
2 mechanism has caused the limb to be completely severed, as they
3 say, the medical student can figure that terminology out, but
4 when the injury causes the extremity to become mangled, which
5 is fairly common in this kind of wounding mechanism, it's
6 inherently sometimes obvious that that mangled extremity cannot
7 be salvaged and so we would call that -- we'd use the
8 terminology of "traumatic amputation" or "near traumatic
9 amputation" as an initial diagnosis.

01:03 10 Now, you never know for sure whether an extremity can be
11 salvaged or not until you're in the operating room and you can
12 see the details. But it's not an unreasonable term to describe
13 many of the wounded limbs.

14 Q. Dr. King, you also mentioned that of the three people that
15 you saw at that particular time, there was one that drew your
16 attention particularly?

17 A. Yes, ma'am.

18 Q. And why is that?

19 A. One patient in particular had a fairly horrific limb
01:04 20 injury with significant ongoing blood loss who I thought was
21 going to die in front of me.

22 Q. Why did you think that?

23 A. You know, it's easy and it's difficult to answer. The
24 difficult part is if you ask me to characterize, for example, a
25 certain blood pressure of, I would say, someone who is about to

1 die, or a certain pulse rate or something, although those seem
2 like objective numbers, sometimes they're not very predictable
3 of what a patient's outcome might be. However, more important
4 than a set of absolute numbers is the interpretation of the
5 visualization of injuries from an experienced eye. And for an
6 experienced surgeon, it's very easy to tell who has lost almost
7 all of their blood, not because their blood pressure is low,
8 because everybody's blood pressure was low who was injured, but
9 because they're pale and clammy and losing consciousness and
01:05 10 their sensorium is altered, a variety of less quantifiable
11 numbers. And it doesn't honestly even take an experienced
12 physician. Some -- you can -- most people can look at another
13 human being who's hurt and figure out who is dying and who is
14 not dying.

15 Q. Dr. King, you just used the word "sensorium." What do you
16 mean by that, and could you spell that for the record, please?

17 A. Sure. Sensorium is just a way to describe mental status.
18 So if you're awake and alert and can balance your checkbook and
19 do long division and so on, I would say your sensorium is
01:06 20 largely -- largely -- intact, but when you don't know your own
21 name or can't answer simple questions like where are you or
22 what happened, we would consider that an altered sensorium or
23 altered sense of consciousness as tends to happen with ongoing
24 or significant blood loss in this case.

25 Q. Dr. King, you said before -- you started to list the sort

1 of observations that you made, and I stopped you sort of at the
2 traumatic amputation. What other observations specifically did
3 you make of the patients who came in that day to MGH?

4 A. So, again, largely the same set and characteristic pattern
5 of injury. It's -- and it was a recurring theme not just for
6 me but I mean really around town for all the other trauma
7 centers and physicians caring for these patients. This
8 predictable, identifiable pattern of lower extremity blast
9 amputation with multiple fragmentation, it was sadly the theme
01:07 10 of the day and is entirely characteristic.

11 Q. Dr. King, you just talked to us now about you thought
12 someone was going to die. So with respect to the initial
13 injuries, I know this is kind of obvious, but what are the
14 risks at that particular moment?

15 A. So for any patient with this characteristic type of
16 injury, the dominant preventible cause of death is
17 exsanguination. Exsanguination is just a term that means rapid
18 blood loss. And you have a -- every human has a finite amount
19 of circulating blood volume in their bodies. And generally you
01:08 20 tolerate moderate amounts of blood loss very well, right? You
21 donate a unit of blood at the Red Cross and you go home, have
22 some orange juice, you're okay. And your body has plenty of
23 compensatory mechanisms that make that okay for you.

24 At some point, though, your compensatory mechanism starts
25 to tip. So it may be safe to donate a unit of blood, but what

1 about two or three or five, and at some point you have nothing
2 left to give. Well, the same is true for patients who are
3 bleeding. You can sustain some injury, any injury, and you can
4 lose a little bit of blood. And although it may be scary,
5 perhaps your life is never threatened. But as that blood loss
6 continues, you lose more and more of the finite amount of
7 volume, of this blood resource that you have, and at some point
8 you no longer have enough to sustain your own life and you will
9 die.

01:09 10 Q. And is there, generally speaking, a particular volume of
11 blood in an adult?

12 A. So generically speaking, yes. So the average 70 kilogram
13 adult has approximately five liters of blood in their body
14 understanding that there's variability for height and weight
15 and body mass index and so on. But approximately. The average
16 adult approximately has five liters of blood.

17 Q. Dr. King, would I be correct in saying -- or asking if, in
18 fact, the biggest problem presented at that particular point in
19 time at the initial presentation of the patient is to stop the
01:10 20 bleeding?

21 A. Not just yes, but an enthusiastic yes. In fact, on the
22 military side we've even changed the way we used to -- we
23 approach injuries like this. Traditionally, people are
24 taught -- and probably not just physicians. Laypeople are
25 taught the ABCs of people being injured: airway, breathing and

1 circulation. And very early on, on the battlefield, you
2 recognize that something may be more important than A, and
3 that's H, which is hemorrhage control. So for someone who
4 sustains this kind of traumatic injury, the most important
5 maneuver is to stop the blood loss first.

6 Q. And how's that done?

7 A. So it depends on where you're bleeding. So patients who
8 are bleeding from an extremity injury, like these types of
9 lower extremity blast injuries, there's a few ways to
01:11 10 intervene. The simplest is the one that's most reflexive. So
11 you cut yourself, you put your hand on it, right? So that's
12 applying direct pressure. That's fairly intuitive for most
13 small wounds and almost everyone knows how to do that.

14 And, of course, as wounds get bigger and more dramatic
15 with more and more blood loss, you need to escalate the
16 aggressiveness of hemorrhage control, or bleeding control, and
17 that can be really as simple as putting your hand into and on a
18 much bigger wound to compress it or applying a tourniquet
19 around the limb as a very -- more definitive hemorrhage control
01:12 20 maneuver if the wound is so devastating that you can't just put
21 your hand on it and apply pressure.

22 Q. Is there difficulty when the wound is sort of at a
23 junction in the body?

24 A. So that's a different classification of bleeding that is
25 extremely problematic. So limb bleeding, so that is a wound

1 below the shoulder -- or pardon me, below the groin -- are the
2 types of wounds that we characterize as tourniquetable. So
3 wherever the bleeding is, you can apply -- there's enough space
4 to apply the tourniquet above that wound and control the blood
5 loss.

6 Now, where your limbs meet your torso, so in the groin or
7 in the axilla, in the armpits, bleeding injuries in those sites
8 cause tremendous bleeding and there's no way to wrap a
9 tourniquet around that injury. So it's higher than you could
01:13 10 wrap a belt or a tourniquet around your limb. It's truly in
11 the groin. So we call those wounds by definition junctional
12 wounds. They occur at the junction between a limb and your
13 torso.

14 Junctional wounds are, by definition, non-tourniquetable,
15 so you cannot put a tourniquet on them. It's the biomechanics,
16 it's physically impossible, and they're extremely challenging
17 to control. And usually the way hemorrhage is controlled for
18 those wounds is with direct pressure with your hand or with
19 wound packing. There's a variety of ways, of materials you can
01:13 20 pack into the wound to help stop bleeding. And although not
21 entirely popular in the civilian world, in the military side
22 there are some devices that are used to help control junctional
23 bleeding but they haven't quite made their way into the
24 civilian world.

25 The real solution for junctional hemorrhage is an

1 operation. You need a surgeon for that kind of devastating
2 wound.

3 Q. Dr. King, with respect to the blood loss, is the blood
4 loss when a wound such as we are talking about today occurs, is
5 death instantaneous?

6 A. So the science on blood loss and death is extraordinarily
7 solid. The research that's been done on hemorrhage and
8 resuscitation, that is, bleeding and control of bleeding, is
9 extensive particularly in the past 14 years of warfare. Dare I
01:14 10 say, it is almost impossible to bleed to death instantaneously.
11 It is a long gray scale, right? Let me give you -- may I give
12 an example?

13 Q. Yes, please.

14 A. So if you sustain a very small injury, a very small cut
15 and the blood loss from that cut is what you might consider
16 minor in your own mind. You say, "Gee, that's not bleeding
17 that much." But you don't do anything about it. And suppose
18 it's bleeding at a rate of 100 cc's per minute, but you do
19 nothing. You have five liters of blood. So over a period of
01:15 20 many minutes or half an hour, 45 minutes, although that
21 bleeding is slow, eventually you will run out of blood and you
22 will die. If you have a more severe injury where you're
23 bleeding at one liter per minute from perhaps a much bigger
24 wound, you only have five liters of blood and so you'll bleed
25 to death in less than five minutes.

1 So this is the spectrum that I mean. You can -- patients
2 bleed to death from minor injuries all the time, they just do
3 so over a more extended period. And naturally these are
4 sometimes patients who sustain an injury far away from medical
5 care, nobody knows what to do, or they're alone and can't
6 intervene to help themselves. There are a variety of
7 circumstances you can think of where someone might have a minor
8 injury and bleed to death slowly over a long period of time.

9 And so that's the long gray scale. Blood loss does not
01:16 10 result in instantaneous death with rare, rare exceptions that
11 you could maybe conceive of some bizarre circumstance. But
12 speaking in solid scientific generalities, blood -- death from
13 blood loss does not occur instantaneously.

14 Q. And, Dr. King, let's presume that the issue of blood loss
15 has been resolved. Does the issue of the risk of death
16 disappear at that point?

17 A. Oh, absolutely not. It's just beginning. So, you know,
18 this -- taking care of trauma patients who are bleeding is not
19 a one-shot deal. Losing all your blood volume and then
01:17 20 stopping the blood loss itself is its own set of additional
21 injury, of physiological insult. So your body is not meant to
22 do that.

23 So we can stop the blood loss and I can even give you
24 blood back, right? I can transfuse you many -- as much as you
25 need or as much as I want. I can give you lots and lots of

1 blood back to replace what you lost, but that blood you're
2 getting back is not yours. It's donated blood; it's bank
3 blood. It's not the same thing. It's not half -- or even a
4 quarter as good as your own blood. And doing that -- we do
5 that because there is no other good way right now. I would
6 love to be able to transfuse you your own blood. It's just not
7 possible in 2015.

8 And so giving you back that blood and subjecting you to
9 the stress of an operation, or in the case of these patients,
01:18 10 no one rarely had a single operation, right? We do many
11 operations over the course of an extended period. And that
12 surgical insult on top of surgical insult and physiologic
13 stress and more and more blood transfusions, and every time we
14 do another operation and give you another unit of blood to
15 replace that which you lost, it's more stress to your body.
16 And those insults keep piling up and up and up. And every time
17 you do that, it makes your body more subject to risk of
18 infection, organ failure, kidney failure, heart failure, lung
19 failure, and so on and so on.

01:19 20 Q. And then with respect to the continued repair, if you
21 will, of the injuries, outside of surgery and the risks
22 attendant with that, are there other risks?

23 A. Yes. So nothing is for free here, right? Once upon a
24 time we used to treat -- we used to treat trauma more -- pardon
25 the analogy, more like a marathon. You had an injury, we took

1 you to the operating room and we just worked on it and fixed
2 everything all at once until every last little bit was squared
3 away. We recognize now that that's generally a poor approach
4 to trauma care.

5 Instead, what we do is on the first operation, we fix only
6 that which is absolutely essential and lifesaving, and then we
7 bring you to the ICU and let you recover for a period of time.
8 Sometimes that's a few hours, sometimes it's a few days. Then
9 we go back and do a little more surgery and fix a few more
01:20 10 things, and then we give you a break and let you recover.

11 And by doing this, as opposed to one big operation, doing
12 many, many small ones, we spread out the stress of surgery. So
13 instead of putting an elephant on your back all at once, we put
14 smaller things on you. Smaller amounts of stress allow you to
15 recover from that stress, and we go back.

16 Now, we do that because the science suggests this is the
17 best way to have living patients at the end, right? So there's
18 a survival benefit. It's called staged surgery, to staging
19 surgery like this, abbreviating surgery.

01:20 20 But each of those operations comes with its own set of
21 risks, right? Every time you go to sleep -- I don't want to
22 scare anybody away from surgery. You need surgery. But it's
23 not for free. Every single time you go to sleep, even before
24 the surgeon starts operating, there's a risk you might never
25 wake up. You could have a heart attack or stroke or a giant

1 blood clot. And all of this has nothing to do with the
2 operation, per se, it's just the process of going to sleep for
3 whatever operation it is that you're going to have. And having
4 breathing tubes put in and back out and put in and back out for
5 every operation has also its own set of attendant risks. So we
6 do it because we have to but it's not for free, and we know
7 that going in.

8 Q. How about with respect to the type of injuries that the
9 victims suffered here and that you saw with respect to trying
01:21 10 to do limb salvage? You said nothing's for free. Is that
11 free?

12 A. No, limb salvage is definitely not for free. Limb salvage
13 is a catch-all trauma term for describing the staged approach
14 to trying to avoid an amputation, right? So what I said at the
15 beginning is you can look at some patients who don't have
16 a -- sort of a clean amputation where obviously you know that
17 is not possible to successfully reattach a limb.

18 Many patients have a mangled extremity. And on a cursory
19 exam, you could think to yourself there's no way to -- there's
01:22 20 no way that's going to survive. There's no way I could fix
21 that. But you never know for certain until you get to the
22 operating room. And sometimes when you get to the operating
23 room you occasionally will be surprised and you'll say, "Gee,
24 that looked bad downstairs in the emergency department but now
25 that the patient is asleep and I can dissect and see blood

1 vessels and these nerves and these muscles, maybe, you know, if
2 I fix this blood vessel and move this nerve this way and put a
3 muscle in between there, you know, maybe we won't have to
4 amputate this limb."

5 And so largely we take that approach, if you can. We'll
6 go through some extraordinary measures to try to take what is a
7 badly injured limb and make some surgical maneuvers to try to
8 salvage it, to try to bring it back to a usable limb.

9 Sometimes that's successful, often it's not. But just because
01:23 10 something's not successful every now and again doesn't mean you
11 shouldn't try every time when you think it's appropriate.

12 Q. But if you have to take, say, a vein from another part of
13 the body, say the other leg, what are the risks attendant with
14 that?

15 A. So to repeat the theme here, nothing is for free. So if I
16 thought that one limb was potentially salvageable by restoring,
17 say, blood flow to the -- distal to the injured part of the
18 limb -- so if the blood vessel is severed, I need to restore
19 that blood flow, I wouldn't necessarily hesitate to harvest or
01:24 20 borrow -- borrow -- steal a vein from your opposite leg to
21 bring it over to the injured leg so I can sew it in to restore
22 blood flow to the injured leg to try to salvage it.

23 Now, your -- the donor limb, right, the leg where you
24 would borrow or take that vein from to use to try to salvage
25 the other limb, well, that vein is there for a reason, right?

1 Your body has evolved in a way that most of your arteries and
2 veins have a purpose. They do something for you. And so we
3 try to take veins that we think will have the least amount of
4 impact on the donor limb, recognizing that they're there for a
5 reason.

6 So the very simplest example of taking vein from a good
7 leg and bringing it to an injured leg is that removing that
8 vein requires a big incision. That big incision causes pain
9 and suffering and that incision can get infected which causes a
01:25 10 chronic wound which needs a skin graft and debridement. That's
11 just a single example of all the things that can go wrong
12 when -- for a procedure that just rolls off your tongue like,
13 "Sure, we just harvested a vein."

14 Well, yeah, it's easy to say as long as it's not your leg
15 that you're harvesting the vein from. Then it's easy to say.
16 But when it's your limb, all of a sudden you recognize it's not
17 so easy just saying, "I borrowed the vein." There's a whole
18 litany of complications that can come from that: Like I said,
19 infection and wound breakdown and clots. The list is long.

01:25 20 Importantly, though, for patients with this kind of
21 injury, unfortunately you're often borrowing a vein from the
22 lesser injured limb to bring to the more injured limb, right,
23 to try to salvage it. So it's very different than the -- than
24 a diabetic who needs blood flow restored to their foot because
25 they can't walk and get cramps. Now you're -- and you're

1 talking about one limb that might be normal, so you take a vein
2 out of a normal limb. Now you're talking about a threatened
3 limb, one you're trying to salvage, and you're going to take a
4 vein from another limb that also has blast and fragmentation
5 but perhaps isn't as bad as the other. So now you're gambling
6 that this vein which, in a healthy person they may tolerate
7 very well not having anymore, that vein that you just removed
8 may end up being critical to the lesser injured limb surviving.

9 So all I'm trying to say is it's not for free and it's a
01:26 10 little bit of the shell game, moving risk from one side to the
11 other and trying to do the right thing to optimize the best
12 outcome, which is limb salvage.

13 MS. PELLEGRINI: Your Honor, I have more to do but I
14 think this would be a good time to.

15 THE COURT: This may be an appropriate time for a
16 morning recess.

17 MS. PELLEGRINI: Yes, sir.

18 THE CLERK: All rise for the Court and the jury. The
19 Court will take the morning recess.

01:27 20 (The Court and jury exit the courtroom and there is a
21 recess in the proceedings at 11:13 a.m.)

22 THE CLERK: All rise for the Court and the jury.

23 (The Court and jury enter the courtroom at 11:45 a.m.)

24 THE CLERK: Be seated.

25 THE COURT: Let me see counsel at the side.

1 (Discussion at sidebar and out of the hearing of the
2 jury:)

3 MR. BRUCK: We move for a mistrial based on the
4 testimony of this witness so far. We think --

5 THE COURT: Just wait a minute for the music to come
6 back on.

7 MR. BRUCK: We think that every effort to control this
8 extremely prejudicial witness's testimony has effectively
9 failed. He has completely elided the difference between risk
02:00 10 of death and grave risk of death, which is the statutory
11 aggravating factor. He has testified -- he has brought in his
12 military background from the use of the term Operation Enduring
13 Freedom to the 1,000 IED wounds to gratuitous unbidden
14 references to his experience treating wounded soldiers in the
15 field.

16 He has gone on at great length about estimated time of
17 death from hemorrhage in a way that effectively goes beyond the
18 notice that we were provided and the expert witness summary.
19 The witness summary says simply that Martin Richard's death was
02:01 20 not instantaneous; however, this very generalized evidence that
21 he's given about all the different gray scale of time to death
22 effectively opines that all of the witnesses -- all of the
23 homicide victims had some prolonged -- more or less prolonged
24 period of suffering without any notice to us, without any
25 opportunity to challenge that under *Daubert*, to see how that

1 was going to be specified.

2 I sympathize a little bit with Ms. Pellegrini because
3 on top of all these problems, this is a witness who doesn't
4 seem to wait, be guided at all by the question. He wants to
5 give a lecture and then he wants to give another lecture, and
6 he's gone on and on and on. He seems to be uncontrollable.
7 And we think at this point the damage has been done and we ask
8 for a mistrial.

9 MS. PELLEGRINI: Your Honor, Dr. King is an expert,
02:02 10 and as such, his ability to explain the bases and his opinions
11 that follow therefrom are intertwined. I don't believe that
12 any of his references, which were basically two, with respect
13 to where he was deployed and what he has seen, is extremely
14 prejudicial or anything of that nature.

15 I appreciate Mr. Bruck's sympathy but I don't require
16 it. Dr. King is answering the questions that I'm asking, and
17 he's answering them as fulsomely as he can because that's what
18 we discussed.

19 We did give appropriate notice that he would opine
02:03 20 that Martin Richard's injuries would not have killed him
21 instantly. All of the information that I have elicited thus
22 far is as a prelude to that, to explain why Martin Richard
23 would not have died instantly, but also to explain why he's a
24 more vulnerable victim because while he would not have died
25 instantly, he would have died because of those injuries because

1 of his small stature and his volume of blood more quickly than
2 another, meaning that he's more vulnerable due to his age.

3 THE COURT: Okay. I don't think the military
4 references were excessive. I think they fit within what I had
5 indicated on the record earlier where he would be permitted to
6 justify his background and his experience.

7 As to -- his answers have been extended, and I think
8 you should try to keep him on a shorter leash. But I will say
9 this: The usual evil with narratives by witnesses is that they
02:04 10 go beyond the question and start offering evidence that isn't
11 called for by the question. I think by and large his answers
12 have been responsive to the question, although in an extended
13 way.

14 And I think generally he's within the -- I reviewed
15 the disclosure during one of the recesses, and I think he
16 stayed within it at this point. So the motion is denied.

17 (In open court:)

18 MS. PELLEGRINI: May I continue, your Honor?

19 THE COURT: Yes.

02:04 20 BY MS. PELLEGRINI:

21 Q. Dr. King, I just have one further question with respect to
22 the nature of injuries, and that is the pain and the efforts
23 and abilities needed to control pain and the risk that that
24 presents. What type of pain are we talking about?

25 A. So pain is a sensory manifestation, all right? It's

1 something that you feel. And there's a variety of ways pain is
2 generated in your body. The one most people are familiar with
3 is what's called somatic pain. So that is, for example, the
4 pain from a paper cut, right? That type of pain is sharp, it's
5 localizable, meaning if you close your eyes and someone cuts
6 your finger, you know that you cut your finger. And that's
7 probably the most familiar type of pain. And patients who
8 experience some type of trauma, particularly to their skin and
9 soft tissues, experience that kind of pain.

02:06 10 There are -- but there are other types of pain receptors
11 in your body that are not what's called somatic pain; it's
12 called visceral pain. And these are entirely different types
13 of pain receptors that are on the inside largely, the inside of
14 your body. And that produces a very different kind of pain
15 that is not well localized and is, in some cases, much more
16 challenging to treat.

17 The biggest example -- well, the somatic pain is easy.
18 That's like a cut on your skin. Everyone can wrap their mind
19 about that. Probably the -- a classic example of visceral pain
02:06 20 is the pain you get, for example, from a kidney stone or having
21 gallstones, gallbladder disease. So it's an excruciating pain
22 that you can't describe well. People don't know how to put it
23 into words. It's deep. It's not in one spot; it's always in
24 an area and it's evolving.

25 So those are two very different types of pain and they're,

1 in some instances, treated differently. And then, of course,
2 it becomes problematic if you have both types of pain because
3 then you have to treat both of those sometimes the same way but
4 sometimes differently.

5 Q. Dr. King, with respect to the visceral pain, then, then
6 how is that treated?

7 A. Generally speaking, visceral pain is much more challenging
8 to control. It connects to a part of your brain that's more
9 primal, deeper brain function. And the drugs or medicines,
02:07 10 especially in the acute phase -- acute meaning right after
11 injury or at the time of injury -- usually we treat those with
12 a variety of medicines. And, unfortunately, generally
13 speaking, those medicines can control visceral pain fairly
14 well, but like everything else, it's -- there's a risk-benefit
15 profile.

16 So generally what we say is we try never to take your pain
17 away. We can't -- well, we can't take your pain away because
18 doing so would require giving so much medication that you would
19 be unconscious and, of course, if you take that to its logical
02:08 20 end point, you give so much pain medication that you would die,
21 so naturally that's not a desirable outcome.

22 So what we try to counsel patients who have terrible
23 visceral pain is that we want to make it tolerable or
24 manageable. And the goal should never be to take pain away; it
25 should be to make it tolerable and manageable because the side

1 effects of making it go away are wildly unacceptable.

2 Q. And, Dr. King, I would like to now leave this area and ask
3 you if you have at our request reviewed the autopsy report and
4 findings of Dr. Henry Nields with respect to Martin Richard.

5 A. Yes, ma'am, I have.

6 Q. All right. And after doing so, did you form an opinion
7 with a degree of reasonable medical certainty regarding Martin
8 Richard's injuries and whether or not, one, they would have
9 killed him instantly?

02:09 10 A. So I can -- based on the anatomic injuries, I can say with
11 an extraordinarily high degree of medical certainty that he did
12 not die instantaneously. As I mentioned earlier, this is a
13 spectrum. Martin died from blood loss, yes, and he died from
14 rapid blood loss, yes, but that is not instantaneous. It is
15 still along the gray scale of blood loss. And whether -- yes.
16 So the answer is yes, with a high degree of certainty I can
17 state his injuries are not consistent with dying
18 instantaneously.

19 Q. And with respect, then, to those injuries, particularly
02:10 20 the evisceration of the abdomen, would that, in fact, based
21 upon your experience, have caused pain?

22 A. Yes, without question. His injury pattern, particularly
23 the abdominal injury, would have engaged both types of pain
24 pathways. So somatic pain from the skin and soft-tissue
25 injuries, so the abdominal wall being disrupted and so on, and

1 the visceral pain which is, as I said, a much more primal, very
2 disturbing kind of pain from the disruption of the internal
3 organs, which is where those visceral pain receptors lie.

4 Q. With respect to the pain receptors, what is it about the
5 abdominal injury that causes that visceral pain?

6 A. So the receptors are very different. And the types of
7 receptors that are on the -- they're called visceral because
8 they're on the viscera. "Viscera" is just a catch-all term
9 that means everything that's within your abdomen, your
02:11 10 intestines and spleen and liver and so on.

11 Those receptors are generally not responsive to, for
12 example, cutting. So if you cut your skin, you will hurt and
13 flinch. If you happen to be awake and someone cuts your bowel
14 or liver, for example, it actually generally doesn't hurt.
15 What does hurt, though, is stretch and distention and twisting.
16 So this is the reason why kidney stones hurt so much. The
17 stone is stuck in the ureter. It causes the ureter to stretch,
18 and those stretch receptors are interpreted by your brain as
19 being incredibly painful. The same is true for a gallbladder
02:12 20 or if you have a bowel obstruction and so on. So it's really
21 stretch, twist and distention that activate those visceral type
22 pain receptors.

23 In Martin's case, there was disruption of his viscera, so
24 of his liver and spleen and intestines, in such a way that the
25 intestines were pulled and twisted, and as we say, on tension,

1 creating stretch that would have, with any degree of certainty,
2 caused visceral-type pain.

3 Q. Dr. King, with respect to Martin Richard and your review
4 of the autopsy and your -- based upon your training and
5 experience, do you have an opinion to a degree of -- reasonable
6 degree of medical certainty as to whether or not he was
7 particularly vulnerable to the effects of a bomb?

8 A. So yes, and here's why: So the way -- one of the primary
9 ways to render yourself safe from an explosion is to create
02:13 10 distance from it, right? So naturally, the farther away you
11 are from an explosion, the safer you are. If you're talking
12 about a set of circumstances where you cannot create distance,
13 right -- so, for example, the explosion is by surprise -- if
14 you can imagine you're 20 feet tall for a moment -- suppose
15 you're 20 feet tall and an explosion goes off at your feet,
16 that explosion would likely injure your legs or your lower
17 legs. It might injure your thighs, for example, but because
18 you're so tall, your torso might be entirely unaffected and you
19 might only have lower leg injuries. On the other hand, imagine
02:14 20 for a moment you're only 3-feet tall, exposed to that same
21 explosion at your feet.

22 Well, if the blast created from that explosion is 3-feet
23 wide, suddenly you're exposed to risk of injury not just to
24 your legs which are right next to it, but because you're
25 shorter, suddenly your torso, abdomen, lungs, trachea, brain

1 and so on, are all exposed within that intense confined -- or
2 perhaps not confined, but within that blast radius.

3 So this gets to the principle of distance away from an
4 explosion. What that means is for someone who is shorter, it
5 puts their vital organs closer to the blast than someone who is
6 taller. So for Martin to be standing very close to that blast
7 puts him at much greater risk of lethal injury than somebody
8 who was taller.

9 Q. And does the partial transection of the abdominal aorta
02:15 10 confirm your opinion?

11 A. Yes, it does. So if the diameter of the aorta is an inch,
12 for example, in an adult, and a fragment flies through it, and
13 that fragment is half an inch -- so it makes a half-inch hole
14 in your 1-inch aorta -- you'll lose blood at a certain rate,
15 right, whatever the rate is, through that hole. On the other
16 hand, if your aorta is only half an inch in diameter and a
17 half-inch fragment flies through it, suddenly the entire thing
18 is disrupted, or more so than it would be if it was an inch in
19 diameter, so the rate of blood loss, or the ratio of blood loss
02:16 20 is much higher because the aorta is smaller. So, again, for a
21 smaller person with the same injury pattern, it puts them at
22 particularly higher risk for injury, blood loss and death.

23 MS. PELLEGRINI: All right. Thank you.

24 I have no further questions for Dr. King.

25 MR. BRUCK: No questions.

1 THE COURT: All right, Doctor. Thank you. You may
2 step down.

3 (The witness is excused.)

4 MR. WEINREB: Your Honor, we need to adjust some of
5 the equipment.

6 MS. CONRAD: Your Honor, may we approach?

7 THE COURT: All right.

8 (Discussion at sidebar and out of the hearing of the
9 jury:)

02:17 10 MS. CONRAD: Your Honor, I want to note that the
11 government is pulling out their screen. As if it weren't bad
12 enough that they're showing the video of Martin Richard
13 writhing in pain, that they're going to show it on an enlarged
14 screen to enhance the impact on the jury. And we object to
15 that both for the same reasons that we objected before, because
16 the use of the larger screen further aggravates the
17 inflammatory effect.

18 MR. WEINREB: Your Honor, the purpose of the large
19 screen is not to inflame the jury but simply to allow them to
02:18 20 see what the evidence is back in the jury room. I believe they
21 have a screen that size that they view all the evidence on
22 through the JERS system. And in any event, the whole point of
23 putting something into evidence is so the jury can actually see
24 it. This enables them to see it. The little screens in front
25 of them really aren't adequate for things that are grainy.

1 MS. CONRAD: The jurors' screen is much smaller than
2 that.

3 THE COURT: I don't see any problem with using the
4 screen.

5 (In open court:)

6 MR. WEINREB: Your Honor, the government calls
7 Michelle Gamble.

8 MICHELLE GAMBLE, duly sworn

9 THE CLERK: State your name, spell your last name for
02:19 10 the record, keep your voice up and speak into the mic.

11 THE WITNESS: Michelle Gamble, G-A-M-B-L-E.

12 DIRECT EXAMINATION

13 BY MR. WEINREB:

14 Q. Good afternoon.

15 A. Good afternoon.

16 Q. Can you remind the jury where you work and what your job
17 responsibilities are?

18 A. Sure. I'm a field photographer in the Boston division of
19 the FBI.

02:19 20 Q. And what were your responsibilities in connection with the
21 Boston Marathon investigation?

22 A. I was in charge of the photographic responsibilities for
23 Boylston Street while the processing of Boylston Street was
24 done, and then back in the office I was in charge of
25 coordinating and organizing all of the photos through all of

1 the scenes, reviewing the videos from the surveillance footage
2 that we received, and then other footage that had come in
3 through the public.

4 Q. And in the course of your work over the past two years,
5 have you reviewed essentially every photograph and every video
6 that was collected?

7 A. Pretty much most of them, yes.

8 MR. WEINREB: Can we have Exhibit 1575, please, which
9 is already in evidence.

02:20 10 Q. Do you see Exhibit 1575?

11 A. I'm sorry?

12 Q. I'm sorry. Do you see the photo in front of you?

13 A. Yes.

14 Q. What is that a photo of?

15 A. That is a photograph in front of the Forum.

16 Q. Let me direct your attention to the -- to where the
17 defendant is. And he's standing -- he's partially obscured by
18 a tree. Is that correct?

19 A. Yes.

02:21 20 Q. All right. If you'd look down, you'll see that there's a
21 sidewalk and then there's a darker area that people are
22 standing on.

23 A. Uh-huh.

24 Q. What is that darker area?

25 A. That is the grate that encompasses the tree.

1 Q. Is that grate still there today?

2 A. No, it is not.

3 Q. What happened to it?

4 A. ERT collected the two pieces of the grate that are closest
5 to the Forum, and I don't know what happened to the other two
6 pieces that are closer to the street.

7 Q. But they were removed as well?

8 A. Yes.

9 Q. The two pieces that ERT collected, what happened with
02:21 10 them?

11 A. Those were logged into evidence.

12 Q. Did you have access to them?

13 A. Yes.

14 Q. All right. And at my request did you remove them from
15 evidence and reassemble the pieces so that they were in the
16 position they were in when they were actually there out on
17 Boylston Street?

18 A. Yes. Yes.

19 Q. Okay. Did you photograph them?

02:22 20 A. I did.

21 Q. And what did you do with the photographs?

22 A. How did I take them or what --

23 Q. How did you take them and then what did you do with the
24 photographs that you took?

25 A. Okay. I put the pieces back -- the left side of the grate

1 was in a few different pieces, so I put that together, measured
2 that, photographed that with a scale. I did the same thing
3 with the opposite side of the grate, so it would be on the
4 right side, measured it separately and together. I then came
5 back to the office and brought the images into Photoshop and
6 sized them in there and printed them out to scale.

7 Q. What does that mean, "printed them out to scale"?

8 A. So they would be pretty much the exact size as they were
9 measured to be.

02:22 10 Q. So that would be the half of the grate that was closer to
11 the Forum restaurant?

12 A. Exactly.

13 Q. Both sides, right and left?

14 A. Yes.

15 Q. And then what about the two quarters of the grate that
16 were closer to the sidewalk?

17 A. I duplicated the right side in order to create the back
18 part of it. So it would be the full four pieces of the grate.

19 Q. Did you put those four pieces together?

02:23 20 A. Yes. I stitched them all together to make the actual size
21 of the grate.

22 Q. And then when you stitched them together, what did you do
23 with them?

24 A. I measured the full grate together with all four pieces.
25 And when I photographed them, I had rulers within the photo.

1 So I put those as an overlay on the photos -- on the ruler that
2 would be in the photo to make sure that that was matching up as
3 well.

4 Q. Are the photos put on a particular surface that makes it
5 easy to carry them around?

6 A. Yes.

7 Q. What surface?

8 A. It's on like a Tyvek-type material, and then there's a
9 backing to it. So a thin backing to it.

02:24 10 Q. Is Tyvek like a rubbery kind of material?

11 A. It's kind of a heftier -- it would be better to use that
12 than something like paper. It's just a heavier, durable, more
13 resilient type of material.

14 MR. WEINREB: Your Honor, Exhibit 1633 is that exhibit
15 that the witness just described with the four photos together
16 on the Tyvek backing. Based on her testimony, I would offer
17 Exhibit 1633.

18 MS. CONRAD: As noted, your Honor.

19 THE COURT: Okay. Admitted over objection.

02:24 20 (Government Exhibit No. 1633 received into evidence.)

21 BY MR. WEINREB:

22 Q. Now, I'm going to ask you --

23 MR. WEINREB: Actually, could we leave that up, your
24 Honor, 1575? Okay.

25 With the Court's permission, I'm going to ask the

1 witness to step off the witness stand and unfold the exhibit.

2 THE COURT: All right.

3 BY MR. WEINREB:

4 Q. Now, that photograph that you were just looking at before,
5 that's on the big screen behind you. Do you see the railing in
6 that photograph?

7 A. Yes.

8 Q. And where is it in relation to the grate?

9 A. It's on the grate, and it appears to be just a little
02:26 10 bit -- a few inches in.

11 Q. Do you see Martin Richard?

12 A. Yes.

13 Q. Can you stand on the exhibit in the spot where he's
14 standing?

15 A. Sure.

16 MS. CONRAD: I object, your Honor.

17 THE COURT: Overruled.

18 MS. CONRAD: Your Honor, I think the exhibit speaks
19 for itself.

02:26 20 BY MR. WEINREB:

21 Q. And I'll just ask Mr. Mellin to take Ms. Gamble's place
22 for a moment.

23 And then do you see the part of the grate where the bomb
24 actually exploded?

25 A. Yes.

1 Q. How can you identify it?

2 A. It's broken in several pieces.

3 Q. And can you stand there, please?

4 A. Sure.

5 MS. CONRAD: Your Honor, objection. I would like to
6 be heard at sidebar. This is misleading.

7 THE COURT: All right. I'll see you.

8 (Discussion at sidebar and out of the hearing of the
9 jury:)

02:27 10 MS. CONRAD: They're trying to make it look like
11 Mr. Tsarnaev was standing in the spot where the bomb was, and
12 that's not true; he was standing further back, which is clear
13 in the photograph. This entire demonstration is highly
14 prejudicial and unnecessary.

15 They've got the grate, which by the way was only made
16 by essentially extrapolating from two pieces, and they've got
17 the photograph. And to have somebody stand there and say this
18 is where Richard was, and then have a human being stand where
19 the bomb was, is highly misleading, inflammatory, unnecessary,
02:27 20 and is not probative of any fact that is relevant in these
21 proceedings.

22 MR. WEINREB: Your Honor, far from suggesting that
23 that's where Mr. Tsarnaev was standing, I don't think I even
24 mentioned Mr. Tsarnaev's name during my entire examination.
25 I'm simply asking the witness to measure the distance between

1 where the bomb exploded and where Martin Richard was standing.
2 We just heard expert testimony that his proximity to the bomb
3 was relevant toward a determination of whether he was
4 especially vulnerable to the effects of the blast based on his
5 small stature, and this will be another brick in the wall of
6 establishing that he was a vulnerable victim and what weight to
7 give to that aggravator.

8 MR. BRUCK: Your Honor, there are other practical
9 things that are relevant factors. First of all, the phone
02:28 10 video shows that after the first bomb blast, there was
11 movement. The government is attempting to suggest that this is
12 the placement of Martin Richard four minutes before the bomb
13 went off. That is actually not what -- when the bomb was set
14 down. That is actually not what the photograph shows. Martin
15 Richard is further away.

16 It's a pointless, needless argument about whether the
17 witnesses are standing in the right place. They have the
18 photographs. The whole thing is a moving sort of kaleidoscope
19 of change. And it is just so prejudicial to create this
02:29 20 spectacle.

21 On top of all of that, to use an adult, which is a
22 human figure that is enormously larger than Martin Richard was,
23 creates again this idea of targeted -- that it's unmistakable,
24 you couldn't possibly miss, and misses the fact there were
25 people in between where the backpack was put down.

1 There is nothing about this scene which resembles what
2 actually happened. It is just sort of like a ballet of
3 prejudice, and that's all it is.

4 MS. CONRAD: And I also would note that if Mr. Weinreb
5 is correct that he's just using a human being to show where the
6 backpack was, then he could use an object to show where the
7 backpack was instead of a human being, which makes it look like
8 that's where Mr. Tsarnaev was. But, you know, this
9 photograph -- I just want to make sure that the record is
02:30 10 clear. This photograph, the testimony is, was taken at 2:48
11 p.m.; not at the time when the bomb went off.

12 MR. BRUCK: And not at the time when the backpack was
13 put down.

14 MR. WEINREB: Your Honor, I'd say all of that goes to
15 the weight of the evidence; not the admissibility. It's the
16 kind of thing cross-examination is for.

17 THE COURT: Yes, I agree it is generally a matter for
18 cross-examination. But I do thing the point -- it's a little
19 misleading to have big people like this in the scale of things.

02:30 20 MS. CONRAD: Without the tree.

21 THE COURT: I think it's okay for her to demonstrate
22 from her knowledge of the scene having seen it and photographed
23 it where things were, but to have people stand on it like chess
24 pieces in Alice in Wonderland I think is --

25 MR. WEINREB: The only thing that I intend to ask her

1 to do at this point is simply to take this tape measure and
2 measure between one point and another. Mr. Mellin need not be
3 standing there. The jury I'm sure will remember.

4 MS. CONRAD: Well, I still object to that, your Honor,
5 again, for the reason Mr. Bruck noted, as far as it suggests
6 that that's where Martin Richard was standing when the bomb
7 went off.

8 THE COURT: No, that can be shown on
9 cross-examination.

02:31 10 (In open court:)

11 MR. WEINREB: Your Honor, I think from the angle where
12 they're seated, some of the jurors can't actually see the
13 exhibit. May they stand up to give them a better view?

14 THE COURT: Yes, they may stand. I did.

15 (The jurors rise.)

16 MR. WEINREB: So I'll just ask Ms. Gamble to do it,
17 then.

18 BY MR. WEINREB:

19 Q. Can you stand before where you were, where Martin Richard
02:32 20 is pictured in that photo, on the grate?

21 A. Sure.

22 MS. CONRAD: Your Honor, as previously noted.

23 THE COURT: Yeah. No, I think it's all right.

24 BY MR. WEINREB:

25 Q. Okay. And then can you stand in the spot where the bomb

1 exploded?

2 MS. CONRAD: Your Honor, again, particularly as to
3 this.

4 THE COURT: No, overruled.

5 BY MR. WEINREB:

6 Q. Now, can you measure the distance between where the bomb
7 exploded and where Martin Richard was standing in that picture?

8 A. I would say about three and a half feet.

9 Q. Thank you. You can resume your seat.

02:33 10 THE COURT: Why don't you leave that in case the
11 defense wants to use it on cross.

12 BY MR. WEINREB:

13 Q. Ms. Gamble, the last time you were here you testified
14 about a Forum restaurant surveillance video?

15 A. Yes.

16 Q. That video has no sound. Is that correct?

17 A. Exactly.

18 Q. In your review of all the photographs and video in this
19 case, did you discover a video that does have sound?

02:33 20 A. Yes, it's -- it was taken next to the Forum restaurant, at
21 the Atlantic Fish Company.

22 MR. WEINREB: May we have Exhibit 774, please.

23 This, your Honor, was not in evidence but it was
24 permitted to be used as a chalk, and that's how we'd use it
25 again.

1 THE COURT: All right.

2 THE WITNESS: Down to the right.

3 BY MR. WEINREB:

4 Q. All right. Here where we have the Forum and the Atlantic
5 Fish Company, can you just -- there you go. Okay.

6 Do you see the Forum restaurant?

7 A. Yes.

8 Q. Can you indicate it by tapping over it?

9 A. (Witness complies.)

02:34 10 Q. How about doing it -- just tap -- here. Is that it right
11 there?

12 A. Yes.

13 Q. Okay. And what's the establishment just to the left of
14 it?

15 A. It's the Atlantic Fish Company.

16 Q. How do you know that the video with the audio that you
17 discovered was taken in front of Atlantic Fish Company?

18 A. The woman that had taken the video --

19 MS. CONRAD: Objection.

02:35 20 THE COURT: Overruled.

21 THE WITNESS: The woman that had taken the video
22 stated that that's where she was standing. And then when
23 you --

24 MS. CONRAD: Objection.

25 THE COURT: No, overruled.

1 THE WITNESS: When you review the video, you can see
2 the stores or the restaurants that are directly across from
3 Atlantic Fish Company within the video.

4 BY MR. WEINREB:

5 Q. Have you been to the Atlantic Fish Company?

6 A. Yes.

7 Q. And have you looked across the street?

8 A. Yes.

9 Q. And in your view, did that match up with what's depicted
02:35 10 in the video?

11 A. Similar, yes.

12 Q. Did you create a copy -- did you create an exhibit in
13 which the sound from that video is synchronized with the events
14 that take place in the Forum surveillance video?

15 A. Yes.

16 Q. How did you synchronize it?

17 A. I stripped the audio out of the Atlantic Fish Company
18 video and I brought that into the timeline for the Forum video
19 and matched the explosion up right when the bomb goes off.

02:36 20 MR. WEINREB: Your Honor, that exhibit is 1634C. The
21 government offers it into evidence.

22 MS. CONRAD: As noted, your Honor.

23 THE COURT: Okay. It will be admitted.

24 (Government Exhibit No. 1634C received into evidence.)

25 MR. WEINREB: If we could just play that,

1 Mr. Bruemmer.

2 (Video and audio recording played.)

3 BY MR. WEINREB:

4 Q. Ms. Gamble, did the FBI ask the families of the decedents
5 who wished to contribute family photos to provide them to the
6 FBI?

7 A. Yes.

8 Q. Did the Richard family provide some family photos?

9 A. Yes.

02:37 10 Q. And did you get those?

11 A. Yes.

12 MR. WEINREB: Your Honor --

13 Q. And you reviewed three of them earlier, 1604-05, -06 and
14 -09?

15 A. Yes.

16 Q. Are those three of the photos you got?

17 A. Yes.

18 MR. WEINREB: The government offers those.

19 THE COURT: All right.

02:37 20 MS. CONRAD: As noted.

21 THE COURT: Pursuant to our previous discussion,
22 they're admitted.

23 (Government Exhibit Nos. 1604-5, 1604-6 and 1604-9
24 received into evidence.)

25 MR. WEINREB: May I have 1605, please -- I'm

1 sorry -- 1604-5.

2 BY MR. WEINREB:

3 Q. Do you recognize this photo?

4 A. Yes.

5 Q. All right. Is this one of the Richard family photos?

6 A. Yes.

7 MR. WEINREB: 1604-06.

8 Q. Is this one of the photos?

9 A. Yes.

02:38 10 Q. Do you know who that is?

11 A. I'm sorry?

12 Q. Do you know who that is?

13 A. That's Martin Richard.

14 MR. WEINREB: And 1604-09, please.

15 Q. Again, do you know who that is?

16 A. Martin Richard.

17 Q. And finally, at my request did you prepare a -- did you
18 take the Forum video and just draw a yellow circle around the
19 figure of Martin Richard so that it's easier to track him?

02:39 20 A. Yes.

21 Q. At one point in that video did you zoom in on a portion of
22 it?

23 A. I did, yes.

24 Q. Is that a fair and accurate video?

25 A. Yes, it is.

1 MR. WEINREB: The government offers 1634D.

2 MS. CONRAD: As noted, your Honor, we object.

3 THE COURT: Okay.

4 (Government Exhibit No. 1634D received into evidence.)

5 MR. WEINREB: If you would just play the beginning of
6 that for now, Mr. Bruemmer.

7 (Video recording played.)

8 MR. WEINREB: Would you pause it, please?

9 BY MR. WEINREB:

02:39 10 Q. Now, that yellow circle, what is that?

11 A. That is -- Martin is in the center of that.

12 MR. WEINREB: Continue, please.

13 Okay. Let's pause it right there, please.

14 Q. And that yellow circle right there, what's in that yellow
15 circle?

16 A. That is Martin.

17 Q. And this is the part where it's slightly enlarged?

18 A. Yes.

19 MR. WEINREB: No further questions, your Honor.

02:40 20 MS. CONRAD: No questions.

21 THE COURT: No questions?

22 Thank you. You may step down.

23 (The witness is excused.)

24 MR. MELLIN: Your Honor, the United States calls Steve
25 Woolfenden.

1 STEPHEN WOOLFENDEN, duly sworn

2 THE CLERK: State your name, spell your last name for
3 the record, keep your voice up and speak into the mic.

4 THE WITNESS: Stephen Woolfenden, W-O-O-L-F-E-N-D-E-N.

5 DIRECT EXAMINATION

6 BY MR. MELLIN:

7 Q. Good morning, sir.

8 A. Good morning.

9 Q. Where are you employed?

02:42 10 A. At Novartis Institute of Biomedical Research.

11 Q. And what is it that you do?

12 A. I'm a cancer biologist. I do translational research for
13 drug discovery.

14 Q. Where did you go to school?

15 A. I went to school at Northern Michigan University.

16 Q. And what degree did you get?

17 A. Bachelor of science in biology.

18 Q. After that, what did you do?

19 A. My wife and I moved from Michigan to Massachusetts, where
02:42 20 I was employed at Charles River Laboratories.

21 Q. You mentioned your wife. What is your wife's name?

22 A. Amber Woolfenden.

23 Q. Do you have a family?

24 A. I do.

25 Q. And how many children do you have?

1 A. I have my son, Leo.

2 Q. How old is Leo?

3 A. Leo's five.

4 Q. In April of 2013, did you attend the Boston Marathon?

5 A. I did.

6 Q. Why did you attend?

7 A. I attended because -- Leo and I attended because my wife
8 Amber was running the race.

9 Q. The morning of April 15th, what did you do?

02:43 10 A. Leo and I awoke. Obviously, I didn't work that day. Leo
11 had the day off from daycare. Amber had left previously to go
12 to Boston to be shuttled to Hopkinton. Leo and I awoke, we had
13 breakfast, did normal things, prepared to -- took a shower, got
14 ready to go to the marathon.

15 Q. In April of 2013, how old was Leo?

16 A. He was three years old.

17 Q. When you say you prepared to go to the marathon, what did
18 you have to do?

19 A. Basic day-to-day routine: dress Leo, brush his teeth,
02:44 20 brush my teeth, had lunch, and then we departed.

21 Q. When you headed out, where did you go?

22 A. We drove to Boston Common and parked in the garage
23 underground.

24 Q. Did you have a stroller or anything with you for Leo?

25 A. We did.

1 Q. What did you have?

2 A. It's a BOB stroller. It was a BOB stroller.

3 Q. Can you describe what a BOB stroller is?

4 A. It's designed for running. It has three wheels. They're
5 similar to the wheels you'd see on a BMX bike, fairly
6 heavy-duty.

7 Q. You have one wheel in front and two in the back?

8 A. Correct.

9 Q. After you parked underground at the Boston Common, what
02:45 10 happened?

11 A. We went upstairs to the ground level and proceeded across
12 the Common and angled towards Boylston Street, towards the
13 church. It was extremely crowded so -- our intention was to
14 meet friends at a place called the M Bar on Boylston. I am no
15 longer unfamiliar with Boylston, but at the time I was very
16 unfamiliar with Boylston.

17 It turns out we were on the wrong side of the street, but
18 we proceeded anyway. There was -- the crowds were extremely
19 heavy, so Leo and I would cut down to Newbury Street, cut back
02:46 20 and across. And we eventually made it to a point where I could
21 see the M Bar on the opposite side of the street.

22 Q. Were you able to cross the street at that point?

23 A. No, we were not.

24 Q. So having the chance to see it but not being able to get
25 over to it, what did you do?

1 A. I texted our friends that we're on the wrong side of the
2 street and I'd have to backtrack and I would see them shortly.

3 Q. At that point, who was with you?

4 A. My son, Leo.

5 Q. Where was your wife at that point?

6 A. My wife, she was running the marathon.

7 Q. Were you tracking her on the phone or anything?

8 A. I was.

9 Q. Okay. Was she near Boylston at that point or not?

02:47 10 A. I don't believe so, no.

11 Q. Okay. All right. So what did you and Leo do?

12 A. I sent the text, put the phone in my pocket, and proceeded
13 towards the finish line. And then the first bomb detonated.

14 Q. All right. When the first bomb detonated, what did you
15 decide to do?

16 A. I was in shock, in disbelief. And then it registered that
17 we needed to get out of there, and the most logical choice
18 would be to make -- take a 180 and go back the other way. And
19 we didn't get that opportunity.

02:48 20 Q. Why not?

21 A. Because the bomb exploded.

22 Q. And at that point in time where you were, how crowded was
23 it?

24 A. It was extremely crowded.

25 Q. When the bomb exploded, what happened?

1 A. It was -- I just remember a sensation of intense heat,
2 pressure. It felt like every part of my body was punched
3 harder than humanly imaginable. At the time I thought I
4 was -- I stayed standing, but that was because I was still
5 holding on to the stroller. I was on the ground. And then my
6 first instinct was to check on my son, Leo.

7 Q. So as a father, what did you do?

8 A. The BOB stroller had a cover attached to it. And I had
9 put the cover down earlier, so I pulled back the cover. And I
02:49 10 discovered Leo was conscious, he was alive. He was bleeding
11 from the left side of his head. And I just became extremely
12 terrified.

13 I started to palpate his body.

14 Q. What do you mean by that?

15 A. Touch his body to see if there were other visible
16 injuries. It didn't appear that there were any. And I gently
17 palpated his scalp where the laceration was, where he was
18 bleeding from his head.

19 Q. Right.

02:50 20 A. And then I thought, Well, let's get out of here. And
21 that's when I discovered my leg had been severed off.

22 Q. So when you said "let's get out of here," what did you
23 physically do? Did you try to get up or --

24 A. Yes.

25 Q. And at that point --

1 A. That's when I discovered my leg was severed.

2 Q. What did you actually see when you looked down?

3 A. I was wearing boots at the time. And my left boot was
4 next to my -- my now stump. And protruding from the top of the
5 boot was my tibia, and there was a large amount of blood
6 present as well. There was also a piece of tissue, roughly 10
7 centimeters in length, and it appeared to be -- it looked like
8 scotch tape covered with blood, and I now know that was my
9 Achilles.

02:51 10 So at that moment I took off my belt and I applied it
11 between -- on my thigh as tight as I possibly could. And then
12 proceeded to try to remove Leo from the stroller and comfort
13 him, and I -- my fingers were so numb I couldn't undo the
14 buckle.

15 Q. When you tried to remove him, how were you removing him?
16 Were you still on the ground or were you trying to stand up or
17 what were you doing?

18 A. I had pulled the stroller down and I was holding the
19 stroller, trying to manipulate the buckles.

02:52 20 Q. What did it smell like?

21 A. It smelled like burning hair, blood, sulphur. It smelled
22 terrible.

23 Q. What was Leo doing?

24 A. Leo was crying and screaming uncontrollably. He was
25 saying "Mommy, daddy, mommy, daddy, mommy, daddy, mommy, daddy,

1 mommy, daddy."

2 Q. What did you do?

3 A. I continued to try to remove him from the stroller. I
4 could not. And that's when a bystander, a good samaritan,
5 became a first responder under the circumstances, came over,
6 asked me if we needed help. I said, "Yes. My son's bleeding
7 from his head. You need to get him out of here. Please get my
8 son to safety." And he said, "I will do that but first I'm
9 going to put another tourniquet on your leg," which he removed
02:53 10 his belt and placed it below my knee. And then he proceeded to
11 take Leo, and then they were off.

12 Q. How did you feel at that point?

13 A. I was completely terrified because I didn't know if I was
14 ever going to see my son again.

15 Q. How heavily was your leg bleeding?

16 A. There was blood all over the sidewalk, all around me, so I
17 didn't -- I just assumed that I was bleeding heavily.

18 Q. When Leo was grabbed by this good samaritan, what was Leo
19 doing?

02:54 20 A. He just continued to scream, "Mommy, daddy, mommy, daddy."

21 Q. At some point did you try to get him back?

22 A. There was another good samaritan bystander who came over
23 and was helping me, just talking to me, and I -- all I was
24 saying to him was, "My son, Leo, someone took him." And I
25 believe he tried to go find him. But he came back to me.

1 Q. So the samaritan came back with Leo?

2 A. Yes.

3 Q. What happened at that point?

4 A. I was just lying on the cement terrified. And several
5 people came up to me, but I only remember one person's face --

6 Q. What did they do?

7 A. -- with certainty.

8 They just stayed with me and talked to me and comforted
9 me. And they said, "You're going to fucking make it. You're
02:55 10 going to fucking make it."

11 Q. Did you think that was the case?

12 A. I had no idea. I thought I could very well die.

13 Q. You said before you were terrified. What were you
14 terrified of?

15 A. I was terrified of losing my son, Leo. I was terrified of
16 never seeing my wife again. I had no idea whether this was
17 going on all the way down the race course. I feared for my
18 wife's safety.

19 Q. At some point was Leo handed off to Officer Tommy Barrett?

02:56 20 A. Yes, he was.

21 MR. MELLIN: Your Honor, if I could have -- this is in
22 evidence -- Exhibit 30 brought up, please.

23 Q. Mr. Woolfenden, do you see Exhibit 30 in front of you?

24 A. Yes, I do.

25 Q. Who is that in the photo?

1 A. That's my son, Leo, being carried by Officer Tom Barrett.

2 Q. And is there blood on the side of Leo's head from that cut
3 on his head?

4 A. Yes, there is.

5 Q. Thank you.

6 After Leo was handed off to Officer Barrett, you remained
7 on the scene. Is that right?

8 A. That's correct.

9 Q. And while you were on the scene, at some point did you
02:57 10 receive attention and were you taken from the scene?

11 A. Yes, I was.

12 Q. Can you describe that for us?

13 A. At some point I could just feel hands on my body transfer
14 me onto a stretcher, being lifted into the air and placed in an
15 ambulance.

16 Q. And at that time were you still conscious?

17 A. Yes.

18 Q. Did you feel pain at that point?

19 A. I felt a mix of sensations. My body felt numb, but at the
02:57 20 same time I felt pain throughout my entire body. I felt hot,
21 cold. It was a mix of sensations.

22 Q. When you were loaded into the ambulance, was anyone else
23 in there with you?

24 A. Yes, there was.

25 Q. Do you know who that was?

1 A. Yes. A woman.

2 Q. Do you know her name?

3 A. Yes, I do.

4 Q. Who was that?

5 A. Gina DiMartino.

6 Q. While you were riding in the ambulance, could you see or
7 did you hear Ms. DiMartino say anything?

8 A. Yes.

9 Q. What was she saying?

02:58 10 A. It wasn't what she was saying; it was she was screaming in
11 pain. She was in intense pain.

12 Q. What did you do?

13 A. I turned my head to her and I asked her her name, and I
14 asked her to give me her hand.

15 Q. Why did you do that?

16 A. Because I wanted to hold someone's hand.

17 Q. Where did you go?

18 A. We were taken to Boston Medical Center.

19 Q. And when you got to Boston Medical Center, what happened?

02:59 20 A. I recall being transferred into the ICU, and on the way in
21 a nurse came up to me and took my hand, and I immediately
22 grasped and pulled her down to my face and I said, "I was
23 separated from my son, Leo. I have no idea where he is. You
24 have to help me find him." And she said --

25 Q. What did she say?

1 A. "Okay. I'll do that."

2 Q. What happened after that?

3 A. After that I believe I was transferred into the triage
4 room. I recall -- I recall screams. Just screams.

5 Q. Of people in pain or what?

6 A. Of people in pain.

7 Q. How were you feeling at that point?

8 A. I was screaming as well.

9 Q. What pain at that point were you feeling?

03:00 10 A. At that point I believe it was similar to what I felt
11 before.

12 Q. Did you go into surgery?

13 A. The last few things I recall in the triage room is someone
14 tugging on my ring finger and I heard, "We can't get the ring
15 off. We're going to have to get the ring cutter." And it
16 occurred to me that maybe they aren't talking about me, maybe
17 they're talking about somebody else in the room, and then I
18 don't recall anything.

19 Q. Prior to surgery, did you ever see Leo?

03:01 20 A. No, I did not.

21 Q. Did you ever see your wife prior to surgery?

22 A. I did. At some point after that I was being
23 transferred -- I'm assuming it was to surgery. And I heard a
24 voice while I was being transferred. That voice was Amber, my
25 wife, saying, "I'm looking for my husband Steve. Oh, my God,

1 there he is right there." And Amber came and grabbed my head
2 and said, "Leo is at Children's Hospital. He's okay. He's
3 alive."

4 Q. How did you feel after that?

5 A. I felt at a certain peace, as much at peace as you can
6 feel under those circumstances.

7 Q. Do you remember when you woke up?

8 A. I do.

9 Q. When was that?

03:02 10 A. It was on Wednesday.

11 Q. So you went in for surgery Monday night and you woke up
12 Wednesday?

13 A. Correct.

14 Q. When you woke up, what did you find out had happened to
15 your body?

16 A. I found out that I had lost my left leg below the knee. I
17 was quite certain that was the case out on Boylston, at the
18 scene, but I didn't know the extent -- the exact extent.

19 Q. When you woke up, who was in your room?

03:02 20 A. My wife's former boss and supervisor.

21 Q. All right. Do you know where your wife was at that point?

22 A. My wife's former boss and supervisor let me know that
23 Amber was with Leo at Children's Hospital in Boston.

24 Q. Do you know how long Leo was in the hospital?

25 A. Leo was discharged Thursday evening.

1 Q. Do you know the extent of Leo's injuries?

2 A. I do.

3 Q. What were they?

4 A. Leo had a laceration on the left side of his head. It was
5 approximately a centimeter in length. He also had a skull
6 fracture, approximately a centimeter in length, that required
7 four sutures, I believe. His left eardrum was also perforated,
8 and he had minor burns.

9 Q. When were you reunited with Leo?

03:03 10 A. Thursday evening.

11 Q. He came to your hospital room?

12 A. He did.

13 Q. Who was there at that time?

14 A. Well, Amber, my wife, brought Leo into the room, and I
15 believe my mother and father were in the room at the time, but
16 I'm not -- there were several people in the room. I can't
17 recall everyone who was there.

18 Q. How many total surgeries did you have, Mr. Woolfenden?

19 A. I believe I had two -- I had formal amputation the night
03:04 20 of Monday and then probably some revisional surgeries on
21 Tuesday. I also had injuries to my right leg. I had two
22 lacerations, roughly five to six centimeters in length, one
23 across -- on the anterior portion roughly between my patella
24 and my ankle.

25 Q. When you say "anterior portion," what do you mean by that?

1 A. The front of my leg.

2 Q. Okay.

3 A. And another laceration that was on the inside of my calf
4 muscle. And that required removal of some tissue to remove
5 shrapnel.

6 Q. Did you have any injuries to your ears?

7 A. Yes, I did.

8 Q. What was that?

9 A. My right eardrum was perforated.

03:05 10 Q. Did you have to have surgery or anything for that or has
11 that healed?

12 A. No, I did not. It resolved on its own.

13 Q. Did you have any burn marks or burning on your body?

14 A. Yes, I did.

15 Q. Where was that located?

16 A. I had random burn marks on my -- you know, on my left leg,
17 above the amputation; some minor burns on my left arm; some on
18 my torso; a burn on my throat near the Adam's apple area. I
19 had a burn to my scrotum area. I had minor burns on my face.

03:06 20 Q. How long were you in the hospital?

21 A. I was discharged from Boston Medical -- I believe it was
22 the following Monday or Tuesday, and I was transferred to the
23 Spaulding Rehabilitation facility in Boston.

24 Q. So seven or eight days in the hospital?

25 A. Yes.

1 Q. And then you were transferred to Spaulding?

2 A. Correct.

3 Q. How long were you in Spaulding?

4 A. I believe I was at Spaulding for 13 days.

5 Q. At some point did you receive a prosthetic leg?

6 A. I did.

7 Q. When was that?

8 A. I believe it was on June 6th, 2013.

9 Q. And as you're testifying here in court today, are you
03:06 10 wearing that prosthetic leg?

11 A. Yes, I am.

12 Q. It's under pants. Is that right?

13 A. Correct.

14 Q. Prior to coming here today, did you have a chance to
15 review what has been referred to as the "Forum video"?

16 A. Yes, I have.

17 Q. Did you see yourself and Leo in that video?

18 A. Yes, I did.

19 MR. MELLIN: Your Honor, if I could please have a
03:07 20 portion of the Forum video played. It's Exhibit 23. It's in
21 evidence.

22 23I is the clip, Mr. Bruemmer.

23 Q. Before we start --

24 MR. MELLIN: If we could pause there for a moment.

25 Q. -- Mr. Woolfenden, as you look at Exhibit 23I, this clip

1 of the Forum video, do you see yourself in it?

2 A. Yes, I do.

3 Q. Where are you?

4 A. Approximately the center -- top center of the frame.

5 Q. Okay. That screen is interactive. I think you
6 could -- if you could try to circle yourself on it.

7 A. (Witness complies.)

03:08 10 Q. And for the record, you're the gentleman with the cap on
wearing a blue jacket essentially in the middle -- top middle

11 of that picture?

11 A. Correct.

12 Q. At that point in time as you look at that photo, where's
13 Leo?

14 A. You can't see Leo in the frame because he's in a stroller
15 directly in front of me.

16 Q. So it's the three-wheel stroller that you're pushing, and
17 you're behind it?

18 A. Correct.

19 Q. And as we look at this, how difficult was it to maneuver
03:08 20 with that stroller around this crowd of people?

21 A. It was challenging.

22 MR. MELLIN: And, Mr. Bruemmer, if we could start
23 playing that.

24 (Video recording played.)

25 MR. MELLIN: And if you could pause it for just a

1 moment.

2 Q. Mr. Woolfenden, as you look at this now, you're moving
3 down towards the left in this video. Is that right?

4 A. Yes.

5 Q. So you're getting closer and closer to the front of the
6 Forum?

7 A. Yes.

8 Q. Do you see the individual in the white hat that's moving
9 away from the tree in the opposite direction, or coming towards
03:09 10 you?

11 A. Yes, I do.

12 Q. Do you recall seeing that person that day?

13 A. I do not.

14 MR. MELLIN: All right, Mr. Bruemmer. If you could
15 continue.

16 (Video recording played.)

17 MR. MELLIN: If you could pause it there.

18 Q. Do you see yourself now in that portion of this?

19 A. Yes, I do.

03:09 20 Q. And again, you're right in the middle of the frame wearing
21 the blue jacket?

22 A. Correct.

23 MR. MELLIN: All right. Continue, please.

24 (Video recording played.)

25 MR. MELLIN: You can pause it right there, please.

1 Q. Now, sir, what just happened in the video?

2 A. The first explosion occurred.

3 Q. And at this point do you see yourself in this?

4 A. Yes, I do.

5 Q. Can you circle yourself, please?

6 A. (Witness complies.)

7 Q. Thank you. Where's the man in the white hat?

8 A. Directly to my right.

9 Q. And at that time where's Leo?

03:10 10 A. Still directly in front of me in the stroller.

11 Q. Thank you.

12 MR. MELLIN: Mr. Bruemmer, if you can continue.

13 (Video recording played.)

14 MR. MELLIN: Okay. If we could move on to 23J.

15 Q. Picking up right where we left off, the man in the white
16 hat is still right next to you. Is that right?

17 A. Correct.

18 MR. MELLIN: If you could hit "play," please.

19 (Video recording played.)

03:10 20 Q. Do you see him go past you right there?

21 A. Yes.

22 MR. MELLIN: And if you could stop it for a second.

23 Q. There was a moment there where you backed up a little bit.
24 Is that right?

25 A. Yes.

1 Q. And at that moment what were you trying to do?

2 A. I wanted to go in the opposite direction.

3 Q. Were you able to spin around the stroller fast enough?

4 A. No, I was not.

5 MR. MELLIN: Play, please.

6 (Video recording played.)

7 MR. MELLIN: If you could pause that, please.

8 Q. We just saw the second explosion. Is that right?

9 A. Correct.

03:11 10 Q. Okay.

11 MR. MELLIN: If you could start that.

12 (Video recording played.)

13 MR. MELLIN: And pause that, please.

14 Q. As we look at 23J now, do you see there's a cloud of smoke
15 in the middle?

16 A. Yes, I do.

17 Q. Now, are you able to make out in that cloud of smoke the
18 front wheel of the stroller?

19 A. I can.

03:11 20 Q. Can you just circle that for me?

21 A. (Witness complies.)

22 Q. Thank you.

23 At this point in time, where are you?

24 A. (Witness indicates.)

25 Q. And you just circled on the ground behind the stroller?

1 A. Yes.

2 MR. MELLIN: All right. If we could play.

3 (Video recording played.)

4 MR. MELLIN: If you could pause it, please.

5 Q. Right now what are you trying to do?

6 A. I'm trying to check on my son, Leo.

7 Q. And Leo at this point is still in the stroller?

8 A. Yes.

9 MR. MELLIN: All right. Play, please.

03:12 10 (Video recording played.)

11 MR. MELLIN: If we could stop it right there.

12 Q. You are still behind the stroller. What are you doing
13 right now?

14 A. I'm pulling out Leo's blanket that was in the bottom
15 storage compartment of the stroller.

16 Q. And what are you going to do with that?

17 A. I believe I was going to put it over my left leg.

18 Q. So by this time now you know you're injured?

19 A. Correct.

03:13 20 MR. MELLIN: Hit "play," please.

21 (Video recording played.)

22 Q. Leo's still in the stroller at this point?

23 A. Yes.

24 MR. MELLIN: And again, if you could pause it right
25 there.

1 Q. There appears to be an opening now in the back of the
2 stroller. Why is that?

3 A. The way the stroller's designed, there's a flap in the
4 back that you can kind of cut through and reach your child.

5 Q. And that's where you're trying to reach in and grab him?

6 A. Yes.

7 MR. MELLIN: Okay. Hit "play," please.

8 (Video recording played.)

9 MR. MELLIN: And if you could hit "pause," please.

03:14 10 Q. And now finally does someone come up to help you?

11 A. Correct.

12 Q. Is that the individual that you handed Leo off to?

13 A. Yes, it is.

14 Q. Ultimately he comes back with Leo, and then is Leo handed
15 off to Officer Barrett?

16 A. Correct.

17 Q. The man in the white hat, when he walked by you, did he
18 bump you?

19 A. I don't recall if he did.

03:14 20 Q. After Leo is taken out of the stroller, do you know what
21 happens to the stroller?

22 A. What happened to the stroller?

23 Q. Yes.

24 A. No, I don't recall.

25 Q. If I could have you look at Exhibit 1597.

1 MR. MELLIN: Just the witness for right now.

2 For the record, your Honor, this is one of the
3 photographs out of the 2D that was already admitted, but now
4 it's been separated out as just a photograph.

5 THE COURT: It was part of the video?

6 MR. MELLIN: The 2D.

7 MR. BRUCK: As previously noted.

8 THE COURT: I'm sorry?

9 MR. BRUCK: As previously noted.

03:15 10 THE COURT: Yes.

11 Q. And, Mr. Woolfenden, would you look at this photograph?
12 Do you recognize the location that's depicted in the
13 photograph?

14 A. Yes, I do.

15 Q. And where is that?

16 A. That's across the street from the Forum restaurant.

17 Q. And looking towards the Forum?

18 A. Correct.

19 Q. Do you see your stroller in that photo?

03:15 20 MR. BRUCK: Objection.

21 THE COURT: I'm not clear whether you offered this yet
22 or not.

23 MR. MELLIN: I haven't, your Honor. I'm just about
24 to.

25 THE COURT: All right. Okay.

1 BY MR. MELLIN:

2 Q. And do you see your stroller in that photo?

3 A. I do.

4 MR. MELLIN: Okay. Your Honor, I would move into
5 evidence Exhibit 1597, which is essentially already in
6 evidence.

7 THE COURT: Over objection, it's admitted.

8 (Government Exhibit No. 1597 received into evidence.)

9 MR. MELLIN: If I may publish it.

03:16 10 BY MR. MELLIN:

11 Q. And as you look at this, Mr. Woolfenden, could you please
12 circle where your stroller is now the next morning on the
13 scene?

14 A. (Witness complies.)

15 Q. And just so we're all clear, that is the stroller that you
16 were pushing Leo in the day before?

17 A. Yes, it is.

18 Q. And that's the same stroller that the man in the white hat
19 walked by as he walked by you pushing it?

03:16 20 A. Correct.

21 MR. MELLIN: If we could take that down, please.

22 Thanks.

23 Q. Mr. Woolfenden, I'd like to go back to when you were on
24 the ground. At some point when you were on the ground, did you
25 look around and see who was around you?

1 A. Yes, I did.

2 Q. And when you looked around and saw who was around you,
3 what did you see?

4 A. At some point after Leo was taken away, I noticed I
5 was -- I noticed there was some -- there was a presence on my
6 arm. And I turned to my right and I saw a little boy and his
7 mother, Martin Richard and Denise Richard.

8 Q. And when you saw them, what did you see?

9 A. I saw Martin's face, and I could see that -- I could see a
03:18 10 boy that was -- looked like he was fatally injured.

11 Q. When you say you could see his face, what could you see of
12 his face?

13 A. I saw his hair had been singed, I saw that his eyes were
14 rolled in the back of his head and his mouth was agape.

15 Q. Could you see his body?

16 A. Yes, I could. I could see the top part of his torso.

17 Q. What did you see?

18 A. I saw an immense amount of blood.

19 Q. What did you think at that point?

03:18 20 A. I was really, really terrified.

21 Q. Having just turned over Leo to Officer Barrett, how did
22 you feel?

23 A. Terrified.

24 Q. Could you hear anything being said between Denise Richard
25 and Martin Richard?

1 A. I could hear -- I heard "please" and "Martin."

2 Q. "Please" and "Martin"?

3 A. "Please" and "Martin" being uttered by Denise Richard.

4 Q. Was it said once or more than once?

5 A. Many times.

6 Q. Could you see what, if anything, Martin was doing in
7 response to that?

8 A. I didn't see any response to it.

9 Q. And what was Denise Richard doing?

03:19 10 A. Just pleading with her son.

11 Q. At some point did you lock eyes with Denise Richard?

12 A. I placed my hand on her back, and Denise turned to me for
13 a moment and asked me if I was okay.

14 Q. What did you say?

15 A. I said, "Yes, I'm fine."

16 Q. At that point what did she do?

17 A. Her attention was back to Martin.

18 Q. Finally, if I could have you take a look at two very short
19 clips of the video that is zoomed in on Martin. And in
03:20 20 particular, there's a yellow circle, and if you could focus on
21 Martin and his arms in that video.

22 MR. MELLIN: 1634A, please?

23 THE COURT: These are the ones we've discussed, right?

24 MR. MELLIN: That's correct. Yes, your Honor.

25 (Video recording played.)

1 MR. MELLIN: If you could pause it for one second.

2 BY MR. MELLIN:

3 Q. Now, at this particular time, do you see your stroller?

4 A. Yes, I do.

5 Q. And do you know where Martin is behind that stroller?

6 A. He would be on the opposite side of the stroller.

7 MR. MELLIN: Thank you. Thanks.

8 (Video recording played.)

9 Q. Mr. Woolfenden, did you see the arms that went up and then
03:21 10 went down?

11 MR. BRUCK: (Nonverbal gesture.)

12 THE COURT: Sustained. The objection is sustained.

13 Q. Did you see some movement in that?

14 THE COURT: No.

15 Q. Did you see --

16 THE COURT: No, again, this -- I think our discussion
17 was the video speaks for itself.

18 Q. I'm just trying to draw -- do you know -- where was Martin
19 Richard at this point in time?

03:22 20 A. In the yellow circle. Within the yellow circle.

21 Q. Fine. And there's someone over the top of Martin at this
22 point in time?

23 A. Yes.

24 Q. Who is that?

25 A. Denise Richard.

1 Q. Okay.

2 MR. MELLIN: And if we could then move on to 1634B.

3 (Video recording played.)

4 MR. MELLIN: If you could pause it for one moment.

5 Q. Again, as you look at this, where is Martin?

6 A. Right in the center of the yellow circle.

7 Q. And again, who is over the top of him?

8 A. Denise Richard.

9 Q. Thank you.

03:22 10 MR. MELLIN: If you could play that, please.

11 (Video recording played.)

12 Q. Mr. Woolfenden, there's a period in that video where
13 Denise Richard is over the top of Martin. Do you see that?

14 A. Yes.

15 Q. And is that the time when you were next to her?

16 A. Well, yes, I'm next to her in the photograph. Yes.

17 Q. While you were on the scene, was Martin Richard ever
18 moved?

19 A. Was he moved?

03:23 20 Q. Yes, from that area.

21 A. I don't recall.

22 Q. Thank you.

23 MR. MELLIN: Thank you, your Honor.

24 THE COURT: Any examination?

25 MR. BRUCK: Mr. Woolfenden, I have no questions for

1 you. Thank you.

2 THE COURT: All right, Mr. Woolfenden. Thank you.
3 You may step down.

4 (The witness is excused.)

5 MR. WEINREB: Your Honor, the government rests.

6 THE COURT: All right. Jurors, we've gone a little
7 past the one o'clock hour just to finish with the witness,
8 obviously, and you've now heard from the government that that's
9 its evidence for this penalty phase. We're going to
03:24 10 proceed -- it will now be the defendant's turn to present
11 evidence in this phase.

12 As I think I've told you previously, we've told them
13 that they can expect to begin on Monday. So we will not, as I
14 predicted yesterday, be here tomorrow. So we're done for today
15 and tomorrow and we'll resume on Monday.

16 So once again, you'll have some time off, and there
17 will be the temptations that we've talked about, have possible
18 exposure to things, possible investigation. Please, you
19 understand the instructions, that's not to be done at all. You
03:24 20 have to politely push people away if they're going to try to
21 contact you about this. Keep it entirely out of your minds.
22 Think of other things for the weekend. We'll see you on Monday
23 and we'll continue with the evidence in the case, all right?

24 THE CLERK: All rise for the Court and the jury.
25 Court will be in recess.

1 (The Court and jury exit the courtroom and the
2 proceedings adjourned at 1:10 p.m.)
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C E R T I F I C A T E

I, Marcia G. Patrisso, RMR, CRR, Official Reporter of the United States District Court, do hereby certify that the foregoing transcript constitutes, to the best of my skill and ability, a true and accurate transcription of my stenotype notes taken in the matter of Criminal Action No. 13-10200-GAO, United States of America v. Dzhokhar A. Tsarnaev.

/s/ Marcia G. Patrisso
MARCIA G. PATRISSE, RMR, CRR
Official Court Reporter

Date: 1/4/16